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TREASURY DEPARTMENT
UNITED STATES PUBLIC HEALTH SERVICE

HYGIENIC LABORATORY—BULLETIN No. 129
FEBRUARY, 1922

Biological
& Medical
Serials

DIGEST OF COMMENTS
ON
THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA
AND ON THE
NATIONAL FORMULARY

FOR THE CALENDAR YEAR
ENDING DECEMBER 31
1919

By

A. G. DUMEZ

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PREFACE.

This, the fifteenth bulletin of the series of Digests of Comments, like the preceding numbers, embodies a more or less complete review of the literature for the calendar year 1919 dealing with the articles included in the two official drug standards of the United States of America, namely, the Pharmacopœia and the National Formulary.

The literature of 1919 relating to the Pharmacopœia and, likewise, that pertaining to the National Formulary, is of more than usual interest because of the fact that, being the year immediately preceding the one in which active revision of these standards will begin, an unusual amount of preparatory work has been carried on. This is apparent not only in the increased number of comments from individual workers, but in the comments which appear in the published proceedings of the various pharmaceutical and allied organizations. Constructive criticisms and suggestions, such as those offered by the American Drug Manufacturers' Association and the committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association, are the result of cooperative work in the laboratory and in conference and will undoubtedly be most useful to those who are selected to revise these standards.

As in previous bulletins of this series, other comments than those having a direct bearing on the two drug standards of the United States of America have been included in an endeavor to reflect the literature which may have an indirect or future value in this connection. With this end in view, the more important articles on food and drug laws, antinarcotic laws, poison laws, drug-inspection work, cultivation of medicinal plants, drug markets, synthetic remedies, chemotherapy, antiseptics and disinfectants, biologics, and foreign pharmacopœias and standards have been reviewed.

The literature dealing with food and drug laws indicates that there have been no important developments in these fields during the year. The desirability of greater uniformity in the various State and Federal laws continues to be emphasized, but with little apparent effect. Comments on the laws and regulations for the control of the traffic in narcotic drugs are both numerous and varied. In the main, these comments convey the idea that there is need for more stringent regulations to control the international traffic, but that the present regulations for the control of domestic traffic are onerous and in many cases unnecessary. The fact that a bill, providing for the strict control of the sale of carbolic acid, lysol, and other phenol products, was introduced at the last session of the Wisconsin State Legislature indicates that there may be a necessity for more stringent regulations for the sale of these products.

Articles on the cultivation of medicinal plants have continued to appear throughout the year. Many of these contain data obtained as the result of cultural experiments and indicate that this work in most countries is still in an experimental stage, although many drug plants are now being grown successfully on a commercial scale in countries in which no attempt was made to grow them prior to the beginning of the war. The desire to become self-sustaining in this respect appears to be almost universal among the civilized countries of the universe if the literature on the subject can be taken as a criterion.

The literature on synthetic drugs, although not reviewed in its entirety, has been fairly well covered. Apparently nothing radically new has been attempted during the year. In the main, the work reported has followed along certain well-defined lines established some years ago, namely, attempts to prepare a hypnotic superior to those in use at present; attempts to synthesize a local anesthetic which will take the place of cocaine; endeavors to obtain a nonhabit-forming substitute for morphine; and researches on the preparation of compounds which may be used as specifics in the treatment of infectious diseases, such as syphilis, tuberculosis, leprosy, pneumonia, etc. Abstracts of articles dealing with these subjects are given under the headings "Synthetics," "Chemotherapy," and "Arsenic, Nonofficial Compounds."

Certain phases of public-health work continue to be of importance in connection with the revision of the Pharmacopœia. This is especially true of the work relating to the materials and tests employed in clinical laboratories, the standardization of disinfectants and biologics, and to the standardization of certain specifics used in the treatment of syphilis. Comments on these subjects are given under the captions "Biological Products and Tests," "Clinical Tests," "Culture Media," "Stains," "Serums and Vaccines," and "Arsenic, Nonofficial Compounds."

As in the past, the available literature on foreign pharmacopœias and standards has been reviewed. Comments of this nature, although not as numerous as before the war, indicate that work on these standards is rapidly being resumed. Even greater activity may be expected in the near future as active work on the revision of several of these standards is about to begin. As evidence of this condition may be mentioned the fact that the eight members constituting the Belgian pharmacopœial commission have recently been appointed, a commission of 22 members has been appointed to revise the Greek pharmacopœia, while the organization of the work on the revision of the French pharmacopœia has progressed to the point where the personnel of the subcommittees has been announced. In addition, the elaboration of a new national pharmacopœia is to be begun soon, a special commission having been appointed by the ministry of health of Poland for this purpose. References to comments on foreign standards are given under "Comments on Official Articles" where they apply to items in the Pharmacopœia of the United States or the National Formulary, as well as under the headings designated by the names of the respective pharmacopœias.

For the information of those who may not be familiar with the bulletins of this series it is stated that the abstracts contained therein are prepared with a view to making them suitable as working references only, the intent being to call attention to the character and scope of the papers reviewed rather than to record their actual contents. It therefore follows that the space devoted to an abstract is no indication of its relative importance, though some idea of the nature and value of an article may be obtained from its length as indicated by the page reference. In citing references no special effort has been made to record all of the journals in which a paper may have appeared. Where an article has appeared in more than one periodical the more available publication has usually been given preference, even in instances where the original article did not appear in the journal first quoted.

In conclusion the compiler desires to thank the Bureau of Chemistry of the United States Department of Agriculture for the services of Miss Lottie M. Manross, who assisted in the preparation of many of the abstracts, and to express the appreciation of the Bureau of the Public Health Service to the publishers and editors of the journals, periodicals, and reports furnished in exchange; to the secretaries of the State and national pharmaceutical organizations for copies of their annual proceedings; to John Uri Lloyd, of Cincinnati, for copies of the eclectic medical journals; to the editor of Chemical Abstracts for the loan of several publications; and to the officers of the library of the Office of the Surgeon General of the Army, the library of the Department of Agriculture, and the Library of Congress for the use of periodicals and reports not on file in this office.

A. G. D.

DIVISION OF PHARMACOLOGY,
HYGIENIC LABORATORY,
July 26, 1921.

LIST OF THE LITERATURE REVIEWED.

1. TITLE ABBREVIATIONS—JOURNALS.

Abstr. Bact.—Abstracts of Bacteriology, Baltimore, 1919, v. 3.

Am. Druggist.—American Druggist and Pharmaceutical Record, New York, 1919, v. 67.

Am. Food J.—American Food Journal (The), Chicago, 1919, v. 14.

Am. J. Clin. Med.—American Journal of Clinical Medicine, 1919, v. 26.

Am. J. Dis. Children.—American Journal of Diseases of Children, 1919, v. 17, 18.

Am. J. M. Sc.—American Journal of the Medical Sciences, Philadelphia, 1919, v. 156, 157.

Am. J. Pharm.—American Journal of Pharmacy, Philadelphia, 1919, v. 91.

Am. J. Physiol.—American Journal of Physiology, Boston, 1919, v. 47, 48.

Am. J. Public Health.—American Journal of Public Health, 1919, v. 9.

Am. J. Roentgenology.—American Journal of Roentgenology, New York, 1919, v. 6.

Am. J. Sc.—American Journal of Science, New Haven, 1919, v. 47, 48.

Am. J. Syphilis.—American Journal of Syphilis, 1919, v. 3.

Am. Med.—American Medicine, 1919, v. 25.

Am. Perf.—The American Perfumer and Essential Oil Review, 1919, v. 13, 14.

Am. Rev. Tuberculosis.—American Review of Tuberculosis, 1919, v. 3.

Anales soc. española fis. quim.—Anales de la sociedad española de fisica y quimica, Madrid, 1919, v. 17.

Anales soc. quim. Argentina.—Anales sociedad quimica, Argentina, 1919, v. 7.

Analyst (The), London, 1919, v. 44.

Ann. Bot.—Annals of Botany, London, 1919, v. 33.

Ann. Chem.—Justus Liebig's Annalen der Chemie, Leipzig, 1919, v. 418, 419.

Ann. chim. anal. chim. appl.—Annales de chimie analytique et de chimie appliquée, Paris, 1919, v. 1.

Ann. chim. applicata.—Annali di chimica applicata, Roma, 1919, v. 11, 12.

Ann. Falsif.—Annales de Falsifications, Paris, 1919, v. 12.

Ann. inst. Pasteur.—Annales de l'Institut Pasteur, Paris, 1919, v. 33.

Apothecary (The), Boston, 1919, v. 31.

Apoth.-Ztg.—Apotheker-Zeitung, Berlin, 1919, v. 34.

Arch. exper. Path. u. Pharmakol.—Archiv für experimentelle Pathologie und Pharmakologie, 1919, v. 84, 85.

Arch. farmacol. sper.—Archivio di farmacologia sperimentale e Scienze affini, Sienna, 1919, v. 27, 28.

Arch. Int. Med.—Archives (The) of Internal Medicine, Chicago, 1919, v. 23, 24.

Arch. internat. Pharmacod. et Thérap.—Archives internationales de Pharmacodynamie et de Thérapie, Brussels and Paris, 1919, v. 25.

Arch. méd. pharm. mil. Paris.—Archives de médecine et de pharmacie militaires, Paris, 1919, v. 71.

Arch. méd. pharm. nav. Paris.—Archives de médecine et pharmacie navales, Paris, 1919, v. 107, 108

Arch. Pharm.—Archiv der Pharmazie, Berlin, 1919, v. 257.

Arkiv Kem. Min. och Geol.—Arkiv för Kemi, Mineralogi och Geologi, Stockholm, 1919, v. 7, parts 3, 4, 5.

Atti accad. Lincei.—Atti della reale Academia del Lincei, 1919, v. 28.

Australas. J. Pharm.—Australasian Journal of Pharmacy, Melbourne, 1919, v. 34.

Ber. deutsch. chem. Gesellsch.—Berichte der deutschen chemischen Gesellschaft, Berlin, 1919, v. 52.

Ber. deutsch. pharm. Gesellsch.—Berichte der deutschen pharmazeutischen Gesellschaft, Berlin, 1919, v. 29.

Biochem. J.—Biochemical Journal, Liverpool, 1919, v. 13.

Biochem. Ztschr.—Biochemische Zeitschrift, Berlin, 1919, v. 96, 102.

Boll. chim.-farm.—Bolletino Chimico-Farmaceutico, Milan, 1919, v. 58.

Boston M. & S. J.—Boston Medical and Surgical Journal, 1919, v. 180, 181.

Bot. Gaz.—Botanical Gazette, Chicago, 1919, v. 67, 68.

Brit. & Col. Pharm.—British and Colonial Pharmacist, London, 1919, v. 72.

Brit. Food J.—British Food Journal, London, 1919, v. 21.

Brit. M. J.—British Medical Journal, London, 1919, v. 1, 2.

Bull. Agric. Exper. Sta. Porto Rico.—Bulletin of the Porto Rico Agricultural Experiment Station, 1919, No. 26.

Bull. Agric. Intelligence.—Bulletin of Agricultural Intelligence, 1919, v. 10.

Bull. Assoc. Gén. Syn. Pharm. France.—Bulletin de l'Association Générale des Syndicats Pharmaceutiques de France, 1919, v. 22.

Bull. Bur. Stand.—Bulletins of the Bureau of Standards, Department of Commerce, 1919, v. 14.

Bull. Conn. Agric. Exper. Sta.—Bulletin of the Connecticut Agricultural Experiment Station, 1919, Nos. 207–220.

Bull. Florida Dept. Agric.—Quarterly Bulletin of the Florida Department of Agriculture, 1919, January to July.

Bull. gén. Therap.—Bulletin général de Therapeutique, Paris, 1919, v. 171, January to October.

Bull. Hyg. Lab.—Bulletins, Hygienic Laboratory, U. S. Public Health Service, 1919, Nos. 112, 113, 115–122.

Bull. Illinois Bd. Health.—Bulletin of the Illinois State Board of Health, Springfield, 1919, v. 5.

Bull. Imp. Inst.—Bulletin of the Imperial Institute, London, 1919, v. 17.

Bull. Indiana Bd. Health.—Monthly Bulletin of the Indiana State Board of Health, Indianapolis, 1919, v. 22.

Bull. Kentucky Bd. Health.—Bulletin of the State Board of Health of Kentucky, 1919, April, August, September, November, and December.

Bull. Lab. Inl. Rev. Dept. Canada.—Bulletins of the Laboratory of the Inland Revenue Department, Ottawa, Canada, 1919.

Bull. Louisiana Bd. Health.—Quarterly Bulletin of the Louisiana State Board of Health, 1919, v. 10.

Bull. Maine Bd. Health.—Bulletin of the State Board of Health of Maine, Augusta, 1919, v. 2.

Bull. Maine Dept. Agric.—Bulletin of the Maine Department of Agriculture, 1919.

Bull. Massachusetts Bd. Health.—Bulletin Massachusetts State Board of Health, 1919, v. 6.

Bull. New Jersey Dept. Health.—Public Health News Bulletin, Department of Health of the State of New Jersey, 1919, v. 4.

Bull. New York Agric. Exper. Sta.—Bulletin of the New York Agricultural Experiment Station, Geneva, 1919.

Bull. New York Dept. Health.—Bulletin of the New York State Department of Health, 1919, v. 14.

Bull. New York City Dept. Health.—Bulletin of the New York City Department of Health. 1919.

Bull. North Carolina Dept. Agric.—Bulletin of the North Carolina Department of Agriculture. 1919.

Bull. North Carolina Bd. Health.—Bulletin of the North Carolina State Board of Health. 1919, v. 34.

Bull. North Dakota Bd. Health.—Bulletin of the North Dakota State Board of Health. 1919. v. 12.

Bull. North Dakota Exper. Sta. F. Dept.—Bulletin (special) of the Food Department of the North Dakota Agricultural Experiment Station, 1919, v. 5.

Bull. Ohio Dept. Agric.—The Official Bulletin of the Ohio State Department of Agriculture, 1919.

Bull. N. W. D. A.—Bulletin of the National Wholesale Druggists' Association, 1919, No. 14, 20.

Bull. Pharm.—Bulletin of Pharmacy, Detroit, 1919, v. 33.

Bull. pharm. sud-est.—Bulletin de Pharmacie du Sud-Est, 1919, v. 24.

Bull. Rhode Island Bd. Health.—Bulletin of the Rhode Island State Board of Health, 1919, v. 5.

Bull. sc. pharmacol.—Bulletin des Sciences pharmacologiques. Paris. 1919, v. 26.

Bull. soc. chim. France.—Bulletin de la société chimique de France, 1919, v. 25, 26.

Bull. Soc. pharm. Bordeaux.—Bulletin des travaux de la Société de pharmacie de Bordeaux, 1919, v. 57.

Bull. Soc. scient. et méd. l'ouest.—Bulletin de la Société scientifique et médicale de l'ouest, Rennes, 1919.

Bull. U. S. Dept. Agric.—Bulletins of the U. S. Department of Agriculture, 1919, Nos. 507–825.

Bull. Vermont Bd. Health.—Bulletin of the Vermont State Board of Health, 1919.

Bull. West Virginia Bd. Health.—Bulletin of the West Virginia Public Health Council, 1919, v. 6.

Bull. Wyoming Agric. Exper. Sta.—Bulletin of the University of Wyoming Agriculture Experimental Station, 1919, Nos. 120, 121.

Can. Chem. J.—Canadian Chemical Journal, Toronto, 1919, v. 3.

Canadian Pharm. J.—Canadian Pharmaceutical Journal. Toronto, 1919, v. 53.

Centralb. f. Bakteriol. (Orig.).—Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten, (Originale). Jena, 1918, v. 82, Nos. 1–5; 1919, v. 82, Nos. 6–7.

Centralb. f. Bakteriol. Ref.—Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten (Referate), Jena, 1919, v. 67, 68.

Chem. Abstr.—Chemical Abstracts, Easton, 1919, v. 13.

Chem. Age.—The Chemical Age, London, 1919, v. 1.

Chem. Analyst.—Chemist-Analyst (The). Phillipsburg, N. J., 1919, v. 28–30.

Chem. & Drug.—Chemist and Druggist, London, 1919, v. 91.

Chem. & Drug. Australas.—Chemist and Druggist of Australasia, Sydney and Melbourne, 1919, v. 34.

Chem. Eng.—Chemical Engineer, Chicago, 1919, v. 27.

Chem. Met. Eng.—Chemical and Metallurgical Engineer, 1919, v. 21.

Chem. News.—Chemical News, London, 1919, v. 118 and 119.

Chem. Trade J.—Chemical Trade Journal and Chemical Engineer, 1919, v. 64.

Chem. Umschau.—Chemische Umschau auf dem Gebiete der Fette, Oele, Wachse und Harze, 1919, v. 26.

Chem. Weekblad.—Chemisch Weekblad, Amsterdam, 1919, v. 16.

Chem.-Ztg.—Chemiker-Zeitung, Cöthen, 1919, v. 43.

Chem. Zentralbl.—Chemische Zentralblatt, Berlin, 1919, v. 90, parts 1, 2, 3, 4.

Circ. Bur. Stand.—Circulars of the Bureau of Standards, U. S. Department of Commerce, 1919.

Circ. U. S. Dept. Agric.—United States Department of Agriculture, 1919, Circular No. 136.

Colorado Med.—Colorado Medicine, The Journal of the Colorado State Medical Society, Denver, 1919, v. 16.

Com. Rep.—Commerce Reports, Daily Consular and Trade Reports issued by the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce, 1919.

Compt. rend. acad. sc.—Comptes rendus hebdomadaires des séances de l'Academie des sciences, Paris, 1919, v. 168, 169.

Compt. rend. soc. biol.—Comptes rendus des séances et mémoires de la société de biologie, Paris, 1919, v. 82.

D.-A. Apoth.-Ztg.—Deutsch-Amerikanische Apotheker-Zeitung, New York, 1919, v. 39.

Dental Cosmos, Philadelphia, 1919, v. 61.

Dental Digest (The), New York, 1919, v. 25.

Deutsch. med. Wchnschr.—Deutsche medizinische Wochenschrift, Berlin, 1919, v. 45.

Drug and Chem. Markets.—Drug and Chemical Markets, 1919.

Drug. Circ.—Druggists' Circular, New York, 1919, v. 63.

Eclectic M. J.—Eclectic Medical Journal, Cincinnati, 1919, v. 79.

Ellingwood's Therap.—Ellingwood's Therapeutist, Boston, 1919, v. 13.

Endocrinology, 1919, v. 3.

Evans' An. Notes.—Evans' Analytical Notes, 1914–1919, No. 9.

Exper. Sta. Record.—Experiment Station Record, U. S. Department of Agriculture, 1919, v. 40, 41.

Farm. Españ.—La Farmacia Española, Madrid, 1919, v. 51.

Hahnemann. Month.—Hahnemannian Monthly, Philadelphia, 1919, v. 54.

Helvetica Chim. Acta.—Helvetica Chimica Acta, Bâle-Genève, 1919, v. 2.

Homeopath. Rec.—Homeopathic Recorder (The), Lancaster, 1919, v. 34.

Indian J. Med. Research.—Indian Journal of Medical Research, 1919, v. 7 and Special No.

Indian Med. Gaz.—Indian Medical Gazette, 1919, v. 54, Nos. 2, 3.

Japanese Med. Lit.—Japanese Medical Literature, 1919, v. 4, Nos. 1–5.

J. Agric. Research.—Journal of Agricultural Research, 1919, v. 15, 16, 17, 18.

J. Agric. trop.—Journal d'Agriculture tropicale, 1919, v. 19, May, July, and September.

J. Am. Chem. Soc.—Journal of the American Chemical Society, Easton, 1919, v. 41.

J. Am. Inst. Homeop.—Journal of the American Institute of Homeopathy, Chicago, 1919, v. 11.

J. Am. M. Assoc.—Journal of the American Medical Association, Chicago, 1919, v. 72, 73.

J. Am. Pharm. Assoc.—Journal of the American Pharmaceutical Association, Philadelphia, 1919, v. 8.

J. Am. Vet. Med. Assoc.—Journal of the American Veterinary Medical Association, Ithaca, 1919, v. 54, 55, 56.

J. Assoc. Off. Agric. Chem.—Journal of the Association of Official Agricultural Chemists, Baltimore, 1919, v. 3, No. 2.

J. Bact.—Journal of Bacteriology, Baltimore, 1919, v. 4.

J. Biol. Chem.—Journal of Biological Chemistry, New York, 1919, v. 37-40.

J. Chem. Ind. Japan.—Kogyo-Kwagaku (Journal of Chemical Industry, Japan), 1919, v. 22.

J. Chem. Soc. Lond.—Journal of the Chemical Society, London. 1919, v. 115, 116.

J. chim. phys.—Journal de chimie physique, Genève et Paris, 1919, v. 17.

J. Exper. M.—Journal of Experimental Medicine, New York, 1919, v. 29, 30.

J. Franklin Institute.—Journal (The) of the Franklin Institute, Philadelphia, 1919, v. 187, 188.

J. Gen. Physiol.—Journal of General Physiology, 1918-1919, v. 1.

J. H. Hosp. Bull.—Johns (The) Hopkins Hospital Bulletin, Baltimore, 1919, v. 30.

J. Hyg.—Journal (The) of Hygiene, Cambridge, 1919, v. 18.

J. Immunol.—Journal of Immunology, Baltimore, 1919, v. 4.

J. Ind. & Eng. Chem.—Journal (The) of Industrial and Engineering Chemistry, Easton, 1919, v. 11.

J. Infec. Dis.—Journal (The) of Infectious Diseases, Chicago, 1919, v. 24, 25.

J. Iowa Med. Soc.—Journal (The) of the Iowa State Medical Society, Des Moines, 1919, v. 9.

J. Jamaica Agric. Soc.—Journal (The) of the Jamaica Agricultural Society, 1919, v. 23.

J. Lab. & Clin. Med.—Journal (The) of Laboratory and Clinical Medicine, St. Louis, 1918–1919, v. 4.

J. Linnean Soc. Bot.—Journal of the Linnean Society, Botany, 1919, v. 46.

J. Med. Research.—Journal of Medical Research, Boston, 1919, v. 39, 40.

J. Path. and Bact.—Journal (The) of Pathology and Bacteriology, Cambridge University, 1919, v. 23.

J. pharm. Belgique.—Journal de pharmacie de Belgique, Brussels, 1919, v. 1.

J. pharm. et chim.—Journal de pharmacie et de chimie, Paris, 1919, v. 19, 20.

J. Pharmacol. & Exper. Therap.—Journal of Pharmacology and Experimental Therapeutics, Baltimore, 1919, v. 13, 14.

J. Pharm. Soc. Japan.—Journal of the Pharmaceutical Society of Japan (Yakugakuzasshi), Tokyo, 1919, March–December.

J. Phys. Chem.—Journal (The) of Physical Chemistry, Ithaca, 1919, v. 23.

J. Physiol.—Journal (The) of Physiology, London, 1919, v. 53.

J. physiol. et path. gén.—Journal de physiologie et de pathologie générale, Paris, 1919, v. 18, Nos. 1, 2, 3.

J. prakt. Chem.—Journal für praktische Chemie, Leipzig, 1919, v. 99, 100.

J. Roy. Micros. Soc.—Journal of the Royal Microscopical Society, 1919.

J. Roy. Soc. Arts.—Journal of the Royal Society of Arts, London, 1919, v. 67.

J. Soc. Chem. Ind.—Journal of the Society of Chemical Industry, London, 1919, v. 38.

J. Trop. Med. & Hyg.—Journal (The) of Tropical Medicine and Hygiene, London, 1919, v. 22.

J. Washington Acad. Sc.—Journal of the Washington Academy of Sciences, 1919, v. 9.

Lancet (The), London, 1919, v. 196, 197.

Lilly Sci. Bull.—Lilly (The) Scientific Bulletin, 1917, No. 8, 1918, No. 9.

L'Union pharm.—L'Union Pharmaceutique, 1919, v. 60.

Med. Council.—Medical Council, Philadelphia, 1919, v. 24.

Med. Rec.—Medical Record, New York, 1919, v. 95, 96.

Merck's Rep.—Merck's Report, New York, 1919, v. 28.

Meyer Bros. Drug.—Meyer Brothers Druggist, St. Louis, 1919, v. 40.

Midl. Drug.—Midland Druggist and Pharmaceutical Review, Columbus, 1919, v. 53.

Monatsh. Chem.—Monatshefte für Chemie, Vienna, 1919, v. 40, 41.

Montreal Pharm. J.—Montreal Pharmaceutical Journal, 1919, v. 30.

N. A. R. D. J.—Journal (The) of the National Association of Retail Druggists, Chicago, 1919, v. 27, 28, 29.

Nat. Drug Clerk.—National (The) Drug Clerk, Chicago, 1919, v. 7.

Nat. Druggist.—National (The) Druggist, St. Louis, 1919, v. 49.

Nat. Eclect. M. Assoc. Quart.—National (The) Eclectic Medical Association Quarterly, Cincinnati, 1919, v. 10, 11.

Nature, London, 1919, v. 103, 104.

New Idea (The), Detroit, 1919, v. 40.

New Orleans M. & S. J.—New Orleans Medical and Surgical Journal, 1919, v. 71, 72.

New York M. J.—New York Medical Journal, 1919, v. 109, 110.

Northwestern Drug.—Northwestern (The) Druggist, Minneapolis, 1919, v. 27.

Oesterr. Chem.-Ztg.—Oesterreichische Chemiker-Zeitung, Austria, 1919, v. 22.

Off. Insp. Maine Agric. Exper. Sta.—Official Inspections, Maine Agricultural Experiment Station, 1919.

Off. Reg. Iowa Pharm. Assoc.—Official Register Iowa Pharmaceutical Association, 1919, May–December.

Ohio Pub. Health J.—Ohio (The) Public Health Journal, Columbus, Ohio, 1919, v. 10.

Oil, Paint & Drug Rep.—Oil, Paint and Drug Reporter, New York, 1919, v. 95, 96.

Pacific Pharm.—Pacific (The) Pharmacist, San Francisco, 1919, v. 12, 13.

Pennsylvania Med. J.—Pennsylvania Medical Journal, Athens, 1919, v. 22, 23.

Perf. & Ess. Oil Rec.—Perfumery and Essential Oil Record, London, 1919, v. 10.

Pharm. Era.—Pharmaceutical (The) Era, New York, 1919, v. 52.

Pharm. J.—Pharmaceutical (The) Journal, London, 1919, v. 102, 103.

Pharm. Weekblad.—Pharmaceutisch Weekblad, Amsterdam, 1919, v. 56.

Pharm. Zentralh.—Pharmazeutische Zentralhalle für Deutschland, Dresden, 1919, v. 60.

Pharm. Ztg.—Pharmazeutische Zeitung, Berlin, 1919, v. 64.

Philippine J. Sc.—Philippine (The) Journal of Science, Manila, 1919, v. 14.

Phil. Mag.—The London, Edinburgh and Dublin Philosophical Magazine and Journal of Science, 1919, v. 37, 38.

Physiol. Abstr.—Physiological Abstracts, London, 1919, v. 3, 4.

Pop. Sci. Monthly.—Popular (The) Science Monthly, 1919, v. 94.

Pract. Drug.—Practical (The) Druggist and Pharmaceutical Review of Reviews, New York, 1919, v. 37.

Practitioner (The), London, 1919, v. 102, 103.

Presse médicale, Paris, 1919, v. 27.

Proc. Am. Drug. Mfg. Assoc.—Proceedings of the American Drug Manufacturers Association, 1919.

Proc. Linn. Soc. N. S. W.—Proceedings of the Linnean Society of New South Wales, 1919, v. 44.

Proc. Nat. Acad. Sci.—Proceedings of the National Academy of Sciences, Washington, 1919, v. 5.

Proc. N. W. D. A.—Proceedings of the National Wholesale Druggists Association, New York, 1919.

Proc. Roy. Soc. Lond.—Proceedings of the Royal Society, London, 1919, series A, v. 96.

Proc. Roy. Soc. Med., Therap. & Pharmacol. Sec.—Proceedings of the Royal Society of Medicine, Therapeutic and Pharmacologic Section, 1919, v. 12.

Proc. Soc. Exper. Biol. & Med.—Proceedings of the Society for Experimental Biology and Medicine, 1919. v. 16, 17.

Proceedings of State pharmaceutical associations:

Proc. Alabama Pharm. Assoc., 1919.

Proc. Colorado Pharm. Assoc., 1919.

Proc. Connecticut Pharm. Assoc., 1919.

Proc. Florida Pharm. Assoc., 1919.

Proc. Illinois Pharm. Assoc., 1919,

Proc. Kentucky Pharm. Assoc., 1919.

Proc. Maine Pharm. Assoc., 1919.

Proc. Maryland Pharm. Assoc., 1919.

Proc. Massachusetts Pharm. Assoc., 1919.

Proc. Michigan Pharm. Assoc., 1919.

Proc. Minnesota Pharm. Assoc., 1919.

Proc. Mississippi Pharm. Assoc., 1919.

Proc. Missouri Pharm. Assoc., 1919.

Proc. Nebraska Pharm. Assoc., 1919.

Proc. New Jersey Pharm. Assoc., 1919.

Proc. New York Pharm. Assoc., 1919.

Proc. North Carolina Pharm. Assoc., 1919.

Proc. North Dakota Pharm. Assoc., 1919.

Proc. Oklahoma Pharm. Assoc., 1919.

Proc. Pennsylvania Pharm. Assoc., 1919.

Proc. South Carolina Pharm. Assoc., 1919.

Proc. South Dakota Pharm. Assoc., 1919.

Proc. Tennessee Pharm. Assoc., 1919.

Proc. Texas Pharm. Assoc., 1919.

Proc. Vermont Pharm. Assoc., 1919.

Proc. Washington Pharm. Assoc., 1919.

Proc. West Virginia Pharm. Assoc., 1919.

Proc. Wisconsin Pharm. Assoc., 1919.

Public Health Rep.—Public Health Reports, Washington, 1919, v. 34, Nos. 1-52.

Pure Products, New York, 1919, v. 15.

Répert. Pharm.—Répertoire de Pharmacie, 1919, v. 30.

Rep. Chem. Lab. Am. M. Assoc.—Reports of the Chemical Laboratory of the American Medical Association, Chicago, 1918, v. 11; 1919, v. 12.

Rep. Connecticut Agric. Exper. Sta.—Report of the Connecticut Agricultural Experiment Station, 1919, No. 219.

Rep. Connecticut D. & F. Com.—Twenty-third Report of the Connecticut Dairy and Food Commissioner, 1919.

Rep. District of Columbia Health Off.—Report of the Health Officer of the District of Columbia, Washington, 1919.

Rep. Maine Agric. Exper. Sta.—Thirty-fifth Annual Report of the Maine Agricultural Experiment Station, 1919.

Rep. Massachusetts Bd. Health.—Second Annual Report of the State Department of Health of Massachusetts, Boston, 1919.

Rep. Missouri F. & D. Com.—Annual Report of the Food and Drug Commissioner to the Governor of the State of Missouri, 1918, 1919.

Rep. Nebraska Dept. Agric.—Annual Report of the Nebraska State Board of Agriculture, 1919.

Rep. New Jersey Dept. Health.—Forty-fourth Annual Report of the Department of Health of the State of New Jersey, 1919.

Rep. Rhode Island F. & D. Com.—Tenth Annual Report of the Board of Food and Drug Commissioners, Rhode Island, 1919.

Rep. Texas D. & F. Com.—Twelfth Annual Report of the Dairy and Food Commissioner of Texas, 1919.

Rep. Wisconsin D. & F. Com.—Report of the Wisconsin State Dairy and Food Commissioner, 1919.

Rep. Wyoming D. F. & O. Com.—Fifteenth Annual Report of the Dairy, Food and Oil Commissioner, 1919.

Rev. chim. industrielle.—La revue de chimie industrielle, Paris, 1919, v. 28.

Rev. Farm.—Revista Farmaceutica, Buenos Aires, 1919, v. 62.

Rev. prod. chim.—Revue des produits chimiques, Paris, 1919, v. 22.

Rocky Mountain Druggist (The), Denver, 1919, v. 33.

Schweiz. Apoth.-Ztg.—Schweizerische Apotheker-Zeitung, Zürich, 1919, v. 57.

Science, New York, 1919, v. 49, 50.

Science Abstracts, 1919, v. 22A.

Science Progress, 1919, v. 14.

Sci. Am.—Scientific American, 1919, v. 120, 121.

Sci. Papers Bur. Stand.—Scientific Papers Bureau of Standards U. S. Department of Commerce, 1919, Nos. 331–355.

Sci. & Ind. Bull.—Scientific and Industrial Bulletin of Roure-Bertrand Fils of Grasse, 1914–1919, Series 3, No. 10.

Seifensieder-Ztg.—Seifensieder-Zeitung, 1919, v. 46.

Simmons' Spice Mill, New York, 1919, v. 42.

Southern Med. J.—Southern Medical Journal, 1919, v. 12.

Spatula (The), Boston, 1919, v. 25, 26.

S. R. A.-Chem.—Service and Regulatory Announcements. United States Department of Agriculture, Bureau of Chemistry, 1918, 22, 23; Supplement 30–54; 1919, Supplement 55–61.

Standard Remedies, Chicago, 1919, v. 5.

Svensk farm. Tidskr.—Svensk farmaceutisk Tidskrift, Stockholm, 1919, v. 23.

Svensk kem. Tidskr.—Svensk kemis Tidskrift, Stockholm, 1919, v. 31.

Tech. Papers Bur. Stand.—Technologic Papers of the Bureau of Standards U. S. Department of Commerce, 1919, Nos. 93, 121–146.

Therap. Gaz.—Therapeutic Gazette, Detroit, 1919, v. 43.

Therap. Monatsh.—Therapeutische Monatshefte, Berlin, 1919, v. 33.

Therap. Notes.—Therapeutic Notes, Parke, Davis & Co., Detroit, 1919.

Tr. Am. Inst. Chem. Eng.—Transactions of the American Institute of Chemical Engineers, New York, 1919, v. 12.

Trans. Wis. Acad. Sci., Arts and Letters.—Transactions of the Wisconsin Academy of Science, Arts and Letters, 1919, v. 19.

U. S. Naval Med. Bull.—United States Naval Medical Bulletin, 1919, v. 12.

Virginia Pharmacist (The), Richmond, 1919, v. 4.

Western Druggist (The), Chicago, 1919, v. 41.

West. Pennsylvania Ret. Drug.—Western Pennsylvania Retail Druggist, 1919.

Wis. Med. J.—Wisconsin (The) Medical Journal, Milwaukee, 1919, v. 17.

Wyoming Farm Bulletin.—University of Wyoming Agricultural College and United States Department of Agriculture cooperating, 1919, v. 8, Nos. 7–12.

Year-Book of Pharm. & Trans.—Year-Book of Pharmacy and Transactions of the British Pharmaceutical Conference, London, 1919.

Zentralbl. Biochem. u. Biophys.—Zentralblatt für Biochemie und Biophysik, Berlin, 1919, v. 21.

Ztschr. allgem. österr. Apoth.-Ver.—Zeitschrift des allgemeinen österreichischen Apotheker-Vereines, Vienna, 1919, v. 57, Nos. 45–52.

Ztschr. anal. Chem.—Zeitschrift für analytische Chemie, Wiesbaden, 1919, v. 58.

Ztschr. angew. Chem.—Zeitschrift für angewandte Chemie, Leipzig, 1919, v. 32.

Ztschr. anorg. Chem.—Zeitschrift für anorganische und allgemeine Chemie, Leipzig, 1919, v. 105–109.

Zteschr. exper. Med.—Zeitschrift für gesamte experimentelle Medizin, 1919, v. 8.

Ztschr. exper. Path. u. Therap.—Zeitscharift für experimentelle Pathologie und Therapie, Berlin, 1919, v. 20.

Ztschr. Immun. u. exper. Therap.—Zeitschrift für Immunitätsforschung und experimentelle Therapie, 1919, v. 28.

Ztschr. physik. Chem.—Zeitschrift für physikalische Chemie, Stöchiometrie und Verwandtschaftslehre, Leipzig, 1919, v. 93.

Ztschr. Unters. Nahr.- u. Genussm.—Zeitschrift für Untersuchung der Nahrungs- und Genussmittel, Berlin, 1919, v. 37, 38.

Ztschr. wiss. Mikros.—Zeitschrift für wissenschaftliche Mikroskopie, Leipzig, 1919, v. 36.

2. TITLE ABBREVIATIONS—PHARMACOPŒIAS AND NONOFFICIAL STANDARDS.

Ph. Arg. I.—Farmacopea Nacional Argentina, primera edicón, 1898.

Ph. Austr. VIII.—Pharmacopœa Austriaca, editio octava, 1906.

Ph. Belg. III.—Pharmacopœa Belgica, editio tertia, 1906.

Ph. Brit. V.—British Pharmacopœia, 1914.

Ph. Chil. I.—Farmacopea Chilena, 1886.

Ph. Dan. VIII.—Pharmacopœia Danica, 1907.

Ph. Fenn. V.—Pharmacopœa Fennica, editio quinta, 1914.

Ph. Fr. V.—Pharmacopée Francaise, Codex Medicamentarius, 1908.

Ph. Germ. V.—Pharmacopœa Germanica, editio quinta, 1910.

Ph. Helv. IV.—Pharmacopœa Helvetica, editio quarta, 1907.

Ph. Españ. VII.—Farmacopœa oficial Española, septima edicion, 1905.

Ph. Hung. III.—Pharmacopœa Hungarica, editio tertia, 1909.

Ph. Ital. III.—Farmacopea ufficale del regno d'Italia, terza edizione, 1909.

Ph. Japon. III.—The Pharmacopœia of Japan, 1906 (English translation, 1907).

Ph. Mex. IV.—Farmacopea Mexicana, cuarta edición, 1904.

Ph. Ndl. IV.—Pharmacopœa Nederlandica, editio quarta, 1905.

Ph. Norv. IV.—Pharmacopœa Norvegica, editio quarta, 1913.

Ph. Rom. III.—Pharmacopea Romana, editio tertia, 1893.

Ph. Ross. VI.—Pharmacopœa Rossica, sixth edition, 1910.

Ph. Serv. II—Pharmacopœia Serbica, editio secunda, 1908.

Ph. Suec. IX.—Pharmacopœa Svecica, editio nona, 1908.

Ph. Ven. I.—Farmacopea Venezolana, 1898.

U. S. P. IX.—Pharmacopœia of the United States, 9th Dec. Rev., 1916.

N. F. IV.—The National Formulary of Unofficial Preparations, Baltimore, 1916.

N. N. R.—New and Nonofficial Remedies, Chicago, 1919.

B. P. C.—British Pharmaceutical Codex, London, 1911.

DIGEST OF COMMENTS ON THE PHARMACOPŒIA OF THE UNITED STATES OF AMERICA AND ON THE NATIONAL FORMULARY.[1]

I. GENERAL COMMENTS.

1. LEGAL STATUS AND DEVELOPMENT.

1. PURE FOOD AND DRUG LAWS.

Editorial: Looked at in the right way, restrictive legislation, while framed to be protective of the general public, is really protective of the right-thinking and right-acting pharmacist. If he complains of it, it is up to him to work for the removal from his ranks of the crook and to prevent the entry of the objectionable in the future.—Am. Druggist, 1919, v. 67, No. 8, p. 21–22.

Anon.: A reprint of tentative amendments to rules and regulations for the enforcement of the food and drugs act.—Standard Remedies. 1919, v. 5, p. 29–34.

Anon.: A list of changes in the tentative draft of the new regulations for the enforcement of the Federal food and drugs act suggested by the counsel for the N. A. R. D.—N. A. R. D. J. 1919, v. 28, p. 359–362.

Anon.: The American Drug Trade Conference, at a meeting held November 25, indorsed the Calder bill, S. 3011, which attempts to establish uniformity in the Federal and State food and drug laws.—N. A. R. D. J. 1919, v. 29, p. 394.

Stewart, F. E.: An inquiry into the manner in which cooperation can be secured between state medical and pharmacy boards for joint control over the preparation, purity, distribution, and sale of drugs.—J. Am. Pharm. Assoc. 1919, v. 8, p. 207–212.

Editorial: It is contended that the statement on the label of every patent and proprietary remedy giving its alcoholic content, as required by the food and drugs act, is an invitation to dipsomaniacs. It is thought that it would be infinitely better if the alcohol content was revealed to some properly suited authority rather than to the public.—Standard Remedies, 1919, v. 5, No. 7, p. 12–13.

Editorial: The Bureau of Chemistry, U. S. Department of Agriculture, has issued a statement to the effect that the use of saccharin in food is a menace to health and that it regards foods to which saccharin has been added as adulterated.—Bull. Pharm. 1919, v. 33, p. 487.

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[1] Manuscript submitted for publication July 26, 1921.

Anon.: The Bureau of Chemistry has ruled that saponin cannot be used in food products, holding that its employment "as actually practiced" is for the purpose of concealing "damage or inferiority."—Bull. Pharm. 1919, v. 33, p. 5.

Anon.: The status of the transaction of dispensing a physician's prescription has been ruled on in the British courts and the decision is that it is a sale.—Canadian Pharm. J. 1919, v. 53, p. 196.

Anon.: Note on the regulations governing the preparation and sale of vaccines and serums in Spain as approved by royal decree October 10, 1919.—Pharm. J. Lond. 1919, v. 103, p. 470.

Editorial: French pharmacists are making an effort to have the pharmacy laws amended so that they may be permitted to sell new remedies. At the present time the French law prohibits the sale of "secret remedies," and includes under this description all preparations not included in the Codex, or the formula of which has not been published by the Government.—Chem. & Drug. 1919, v. 91, p. 60–61.

2. SALE AND USE OF POISONS.

Anon.: A bill was recently introduced into the Wisconsin Legislature providing for strict control of the sale of carbolic acid, lysol, and other phenol products. The enormous increase in suicide by these poisons is given as a reason for the introduction of the bill.—Drug & Chem. Markets, 1919, v. 15, No. 46, p. 15.

Jones, Edward L.: Notes on the enforcement of the poison law in the State of Washington.—Pacific Drug Rev. 1919, v. 31, No. 11, p. 17 and 90.

Takata, G., and Kominami: A statistical study of 4,893 cases of poisoning (suicidal, homicidal, medicinal, and accidental) officially reported in Japan during the years 1913–1915.—Japanese Med. Lit. 1918, v. 3, p. 63–66, through Chem. Abstr. 1919, v. 13, p. 481.

Anon.: A book review calls attention to a commentary by C. Crinon on the French laws and regulations governing the traffic in poisons.—Répert. Pharm. 1919, v. 29, p. 28.

3. SALE AND USE OF NARCOTIC DRUGS.

Anon.: A review of the report of the special committee for the investigation of the traffic in narcotic drugs appointed by the Secretary of the Treasury March 25, 1918.—N. A. R. D. J. 1919, v. 28, p. 554–556; Drug & Chem. Markets, 1919, v. 5. p. 13 and 15.

Editorial: From an investigation, it is concluded that there is no occasion to be alarmed over any increase in the drug habit.—Midl. Drug. 1919, v. 53, p. 345–346.

Anon.: At a conference of the heads of all municipal departments of the city of New York, statements were made that the number of persons addicted to the use of narcotic drugs in the city is from 100,000 to 200,000.—Am. Druggist, 1919, v. 67, No. 5, p. 48.

Anon.: It is stated that there are two channels through which narcotic drugs are distributed to those not legally entitled to receive them. One is through the peddler, who secures his supplies illegally, and the other is through the addict, or the pretended addict, who secures the narcotic from physicians who are not particular about the amount they dispense or prescribe, or by visiting a number of physicians and securing a small supply from each.—West. Pennsylvania Ret. Drug. 1919, Feb. 2, p. 2.

Anon.: According to an article in the North China Daily News, an enormous contraband traffic in morphine and Indian opium is carried on in China by the Japanese. Three years ago it was estimated that the Japanese morphine turnover was 6½ tons annually, while at the present time the annual import into China has risen to 18 tons.—Pharm. J. Lond. 1919, v. 102, p. 7.

Anon.: An article dealing with Japan's opium trade in China. Leading firms are accused of smuggling morphine into China under the guise of military stores.—Drug & Chem. Markets, 1919, v. 5, p. 11–12.

Anon.: The Chinese Government has decided to destroy 12,000 chests of opium, which was intended for exportation, the value being assessed at approximately $14,000,000. Measures have also been taken to prevent the manufacture of opium in the Chinese Republic, and persons found with the drug in their possession are to be severely punished.—Pharm. J. Lond. 1919, v. 102, p. 7.

Franken, James L.: A discussion of the significance of the growing sales of paregoric.—Pacific Drug Rev. 1919, v. 31, No. 11, p. 20–22.

Anon.: Because of the fact that addicts are satisfying their craving for narcotics with paregoric, Bateman's drops, and Godfrey's cordial, some druggists are refusing to sell these or similar preparations except on prescription by a physician.—Drug. Circ. 1919, v. 63, p. 512.

Anon.: During the year 1913, the deaths due to the use of cocaine in the "Quartier Latin," Paris, numbered 12. While the sale of cocaine to the public is rigorously restricted in France the importation is exempt from control and it was shown that the supplies of cocaine for illicit traffic in Paris were imported from cities in Germany. This condition is said to be an argument in favor of the international control of habit-forming drugs.—Pharm. J. Lond. 1919, v. 102, p. 25.

Anon.: At the meeting of the board of directors of the Philadelphia Drug Exchange held on May 14, 1919, a motion was passed calling the attention of the American Drug Manufacturers' Association and other drug manufacturing bodies to the apparently needless multiplication of unnecessary strengths of narcotic preparations included in the price lists of manufacturers and urging that the number be minimized to the fewest possible units, so that the burden of making out the Federal and State narcotic reports may be reduced to the lowest possible limit.—Am. Druggist, 1919, v. 67, No. 7, p. 55.

Anon.: A resolution to the effect that the N. W. D. A. pledges itself and its members to discourage the manufacture, sale, and distribution of medicines and proprietary articles, which there is reason to believe are being used by drug habitues as substitutes for narcotic drugs.—Bull. N. W. D. A. 1919, No. 14, p. 5.

Anon.: In discussing an article which appeared in the Baltimore Sun of January 30, 1919, it is stated that the physicians are the worst offenders in the matter of supplying drugs to addicts, but that the odium is usually cast upon the retail drug trade, and that whenever regulations are made for the enforcement of the law restrictions are in the main imposed upon retail druggists.—N. A. R. D. J. 1919, v. 27, p. 714.

Anon.: A note calls attention to the illegitimate traffic in narcotic drugs in Canada. It is stated that inquiry has shown that in many cases the drugs were obtained for export to the United States.—Canadian Pharm. J. 1919, v. 52, p. 299.

Whitney, George H.: The establishment of clinics for the treatment of drug addicts is recommended as a method of disposing of the narcotic evil.—Am. Druggist, 1919, v. 67, No. 4, p. 51–52.

Brokmeyer, E. C.: Recent Federal rulings relating to the dispensing of narcotic drugs are given in full.—N. A. R. D. J. 1919, v. 27, p. 817.

Anon.: The Supreme Court has declared constitutional the section of the Harrison Antinarcotic Act prohibiting sales of narcotics except on the official forms or the prescriptions of physicians.—Drug & Chem. Markets, 1919, v. 5, No. 26, p. 7.

Anon.: A reprint of Treasury Decision 2212, giving instructions on the treatment of drug addicts and restrictions on sales of paregoric and other exempted preparations.—Rocky Mountain Drug. 1919, v. 33, No. 6, p. 8–12.

Clark, C. H.: An explanation of the Harrison law as amended by the revenue act of 1919.—Apothecary, 1919, v. 15, No. 9, p. 20–21.

Editorial: The perusal of the new narcotic regulations is sufficient to convince anyone of the determination of the governmental authorities to enforce the law, and the thoroughness with which every section and paragraph has been drafted is evidence of the full comprehension of the ramifications of the traffic in narcotics. In one direction at least the regulations tend to be helpful to those coming under their application in that the authorities have placed the various articles named in the regulations in juxtaposition with the provisions of the law to which they most nearly relate.—Drug & Chem. Markets, 1919, v. 5, No. 67, p. 6.

Anon.: The Federal regulations affecting the legitimate traffic in narcotics by retail pharmacists are becoming so complicated that even those who have made it their business to study and unravel the various threads are often at a loss to know how to proceed.—Am. Druggist, 1919, v. 67, No. 4, p. 23–24.

Anon.: In an editorial it is stated that while the recent changes have perhaps rendered the Federal narcotic law more effective, they have also made it more onerous.—Bull. Pharm. 1919, v. 33, p. 90.

Anon.: There has been entirely too much energy expended in an attempt to create sentiment in favor of amending the Harrison antinarcotic law and not nearly enough in efforts to enforce the law as it exists.—N. A. R. D. J. 1919, v. 27, p. 862.

Anon.: The Harrison Act does not require the disclosure of the narcotic content where preparations are exempted. There is, therefore, no way by which the pharmacist can ascertain whether or not the preparations which he handles are exempt.—Am. Druggist, 1919, v. 67, No. 3, p. 23.

Editorial: The repeal of section 6 of the Harrison law as specified in the Rainey bill is objected to on the grounds that it would defeat the purpose of the opium treaty, the language of which shows that it was not intended to restrict the sale of opiates for legitimate medicinal purposes.—N. A. R. D. J. 1919, v. 27, p. 552.

Editorial: The attempt which is being made to repeal section 6 of the Harrison Act is characterized as propaganda of the medical men which has for its object the doing away with all proprietary preparations.—N. A. R. D. J. 1919, v. 27, p. 669–670.

Anon.: An editorial in which it is contended that the Harrison law provides all the machinery necessary for the control of the narcotic evil and that all that is necessary to accomplish the desired end is the proper administration of the law by the federal authorities, supplemented by state laws giving authority to the police to enforce the state statutes.—N. A. R. D. J. 1919, v. 27, p. 629.

Anon.: The Drug Trade Conference expresses a desire to have the McCumber amendment to section 6 of the Harrison Act so worded that it will compel the dispensing physician to comply with the same regulations governing the registration of narcotics dispensed as applies to the druggist.—N. A. R. D. J. 1919, v. 27, p. 712.

Anon.: The National Drug Trade Conference objects to the imposition of a $24 per annum tax on pharmacists, whom they contend will be classed as compounders if the new amendments to the Harrison Act are passed by Congress.—N. A. R. D. J. 1919, v. 27, p. 713.

Brokmeyer, E. C.: A letter to the chairman of the Ways and Means Committee of the House of Representatives requesting that representatives of the organized drug trade be heard before the redrafting of the Rainey antinarcotic amendments to the Harrison Act.—N. A. R. D. J. 1919, v. 27, p. 672.

Anon.: A resolution to the effect that the N. A. R. D. express its disapproval of the classification of dealers under the Harrison narcotic law, which makes it necessary for the retail druggist to register in two or more classes.—N. A. R. D. J. 1919, v. 28, p. 1264.

Beringer, George M.: The recent amendment to the Harrison Antinarcotic Act is stated to be another illustration of the need of the departments of the Government for the advice of the drug trade.—Am. J. Pharm., 1919, v. 91, p. 193–199.

Anon: Under the new provision of section 6 of the Harrison Act, general stores, as well as dispensing physicians and retail druggists, will be compelled to keep and preserve a record of every sale of an exempted preparation so that the Government will be in a position to discover just when, where, and how the privileges under section 6 are being abused.—N. A. R. D. J. 1919, v. 27, p. 768–769.

Anon.: A brief summary of the new provisions of the Harrison narcotic law as amended February, 1919.—J. Am. Pharm. Assoc. 1919, v. 8, p. 246.

Evans, W. A.: When physicians take the same stand with respect to opium that they have taken on alcohol, such measures as the Harrison law will become unnecessary.—Bull. Pharm. 1919, v. 33, p. 178–179.

Dohme, A. R. L.: The opinion is expressed that the solution of the narcotic problem appears to lie in the enactment of an amendment to the Harrison Act which will place the enforcement of the law in the hands of the Public Health Service rather than in the Department of Internal Revenue.—J. Am. Pharm. Assoc. 1919, v. 8, p. 487–488.

Editorial: It remains for the drug trade and the public at large to recognize the spirit of the Harrison antinarcotic law, as well as its letter, and help to free our country from this curse.—Midl. Drug. 1919, v. 53, p. 346–347.

Gates, Geo. M.: An article discussing the misuse of heroin.—Pacific Drug Rev. 1919, v. 31, p. 32–98.

Anon.: A resolution adopted by the American Association of Pharmaceutical Chemists states that this association reiterates its resolution adopted two years ago, that the narcotic drug, heroin, be eliminated from all medicinal preparations, and that legislation be enacted to require such elimination.—J. Am. Pharm. Assoc. 1919, v. 8, p. 591.

Anon.: The American Drug Trade Conference, at a meeting held November 25, adopted a resolution opposing the amendment of the Federal food and drugs act recently recommended by the Department of Agriculture, increasing the number of narcotic drugs required to be stated on the labels so as to include all habit-forming and poisonous drugs.—N. A. R. D. J. 1919, v. 29, p. 393.

Anon.: The Maryland Board of Pharmacy has appointed a special committee to investigate the narcotic situation within that State with a view to the enactment of legislation to curb the evil.—N. A. R. D. J. 1919, v. 28, p. 214.

Anon.: A short article giving the more important features of the narcotic law recently enacted by the legislature of the State of New York.—Am. Druggist, 1919, v. 67, No. 1, p. 56–57.

Anon.: A reprint of the New York State department's regulations governing the purchase, sale, short shipments, partly filled orders, and third-party shipments of narcotics.—Drug & Chem. Markets, 1919, v. 5, No. 31, p. 7–8.

Anon.: The opinion is expressed that physicians will resent the tax upon their time and patience which has been imposed by the new regulations governing the sale and use of narcotics in New York State, as a result of the carelessness or dishonesty of some members of the drug and medical professions.—Am. Druggist, 1919, v. 67, No. 1, p. 23.

Saleeby, E. M.: An account of the keeping of narcotic records in the Philippine Islands.—Pacific Drug Rev. 1919, v. 31, No. 12, p. 19.

Anon.: A Cuban law dated July 25 regulates the importation, production, and sales in Cuba of narcotic products. The law provides that only legally established pharmacists and druggists attached to a hospital, clinic, or other similar institution may import or produce the narcotic drugs and preparations enumerated in the act.—J. Am. Pharm. Assoc. 1919, v. 8, p. 1117.

Anon.: Pharmacists in Belgium are compelled to record even the smallest quantity of alcohol in prescriptions or sold in the pharmacy.—Chem. & Drug. 1919, v. 91, p. 51.

Anon.: The *Gaceta de Madrid* recently contained a royal decree prescribing regulations for the control of the traffic in opium, its derivatives, the alkaloids, and preparations containing such substances in any form in Spain. The importation and sale of opium prepared for smoking is absolutely prohibited.—Chem. & Drug. 1919, v. 91, No. 1, p. 37.

Anon.: It is the desire of the Home Secretary of England that Parliament keep war-time regulation, restricting the use of morphine, opium, and cocaine in force long enough to allow legislation to be passed to give effect to the provisions of the International Opium Convention of 1912.—Pharm. J. Lond. 1919, v. 103, p. 133.

Editorial: As a remedy for the defects in the law regulating the traffic in habit-forming drugs in Great Britain, it is suggested that the regulations should be extended to include morphine and heroin; that the stocks, as well as registers, should be inspected; and that these inspection duties should be taken from the police and placed in the hands of responsible officials drawn from the medical profession or the drug trade.—Chem. & Drug. 1919, v. 91, No. 1, p. 45.

Matsumura, K.: A translation of the laws and regulations relating to the production, manufacture, compounding, sale, dispensing, or giving away of opium, its salts or derivatives or preparations in Japan.—Pacific Pharm. 1919, v. 13, p. 37–40.

Anon.: Reuter states that the Japanese Government opium bill provides that opium may not be exported without the permission of the minister for home affairs. The penalty for violating the law is imprisonment not exceeding five years and a heavy fine.—Chem. & Drug. 1919, v. 91, No. 14, p. 62.

Salm, G. J., and van der Wielen, P.: A comparison of the opium laws of France and Holland. The French law is stated to be more drastic than the Dutch.—Pharm. Weekblad, 1919, v. 56, p. 1529–1539.

Anon.: A brief summary of regulations issued by the Commissioner of Internal Revenue for the sale of preparations containing alcohol.—J. Am. Pharm. Assoc. 1919, v. 8, p. 244–245.

Anon: A reprint of the regulations of the internal revenue commissioner covering the use of alcohol in the manufacture of tinctures and fluid extracts, homeopathic prescriptions, Jamaica ginger, flavoring extracts, etc.—Drug & Chem. Markets, 1919, v. 5, p. 7–8.

Anon.: A discussion of recent Federal and State prohibition legislation in its relation to the drug trade.—Am. Druggist, 1919, v. 67, No. 4, p. 53–54.

Beringer, George M.: An editorial discussing certain phases of prohibition enforcement which are of pharmaceutical interest.—Am. J. Pharm. 1919, v. 91, p. 701–707.

Anon.: Some explanatory remarks on the national prohibition act which became effective October 28, 1919.—N. A. R. D. J. 1919, v. 29, p. 200–204.

Eberle, E. G.: An editorial discussing the effect of prohibition legislation on pharmacy and related industries.—J. Am. Pharm. Assoc. 1919, v. 8, p. 530–531.

Anon.: An account of the conferences on alcoholic preparations held by the officials of the Bureau of Internal Revenue December 1 to 5, 1919. The use of tartar emetic to render bay rum unfit for beverage purposes was objected to on the grounds that the practice is dangerous.—Bull. N. W. D. A. 1919, No. 20, p. 1–3.

Editorial: Denver jobbers, believing that many of the orders coming to them for official preparations containing alcohol are not being ordered in good faith, and are not to be used legitimately, are refusing to fill such orders.—Rocky Mountain Drug. 1919, v. 33, No. 8, p. 5.

Editorial: In view of the new rulings of the Commissioner of Internal Revenue relative to the prescribing and dispensing of alcoholic liquor, it is recommended that pharmacists should decline to dispense prescriptions calling for wines and other intoxicating beverages.—Drug. Circ. 1919, v. 63, p. 307.

Anon.: The regulations issued by the Bureau of Internal Revenue covering the sale of wines and liquors for medicinal purposes permit physicians to prescribe wines and liquors for internal use and alcohol for external use, and also permit druggists to fill such prescriptions. These regulations are described as a miserable transaction.—N. A. R. D. J. 1919, v. 28, p. 589.

Bodemann, Wilhelm: A plea to pharmacists to refrain from filling prescriptions calling for alcoholic liquors.—N. A. R. D. J. 1919, v. 28, p. 693–694.

Hilton, S. L.: A letter setting forth the needs for alcohol in pharmaceutical preparations.—N. A. R. D. J. 1919, v. 28, p. 466–467.

Anon.: A report of the conference between representatives of the Bureau of Internal Revenue and of barbers' supply, perfume, liquid medicinal and flavoring extract interests held for the purpose of securing information necessary for drawing up regulations for enforcing the prohibition law.—N. A. R. D. J. 1919, v. 29, p. 447–454.

Anon.: Attention is called by the prohibition commissioner to a plan which provides for a central dispensing pharmacy to which all prescriptions for intoxicating liquors can be diverted by druggists who are stockholders. It is said that the plan is to be adopted by San Antonio, Texas.—N. A. R. D. J. 1919, v. 29, p. 563–564.

Withrow, James R.: With the passage of the prohibition amendments, the chemist must exercise watchful care over future legislation so that no unnecessary hardship will be brought upon chemistry, and it is his duty to eliminate as rapidly as possible the need for undenatured alcohol in every laboratory and manufacturing operation.—J. Ind. & Eng. Chem. 1919, v. 11, p. 253–254.

Editorial: Technical compliance with the terms of the national prohibition statute is not sufficient, but druggists are being held morally and legally responsible for the use purchasers make of alcohol, whiskey, and alcoholic preparations sold on prescription or otherwise.—Western Druggist, 1919, v. 41, p. 367.

Anon.: An article calls attention to the fact that alcohol is a necessary constituent of various medicinal preparations because of its solvent and preservative properties. For this reason prohibition laws should not be made so stringent that they will prevent its use for this purpose.—N. A. R. D. J. 1919, v. 27, p. 765–766.

Anon.: The Drug Trade Conference, in considering nonbeverage alcohol legislation, recommends that what is known as the "Arizona amendment" be favored as a model provision to be incorporated in the prohibition laws of the various States legislating on this subject.—N. A. R. D. J. 1919, v. 27, p. 593.

Anon.: A compilation of late Treasury rulings on alcoholic medicinal compounds.—Am. Druggist, 1919, v. 67, p. 52–53.

Anon.: An editorial discussing probable legislation in England for the control of the drinking of methylated spirits.—Chem. & Drug. 1919, v. 91, No. 11, p. 63.

Beringer, George M.: In a discussion of the provisions of Treasury Decision No. 2788, the Treasury Department is criticized for its ruling forbidding the sale of U. S. P. alcohol for medicinal purposes, even on a physician's prescription.—Am. J. Pharm. 1919, v. 91, p. 199–202.

Woodruff, Chas. M.: A discussion of the question, What is to be the future of alcoholic medicinal preparations?—Bull. Pharm. 1919, v. 33, p. 190–192.

Anon.: A resolution to the effect that the N. A. R. D. is of the opinion that prohibition legislation should not provide for the sale by pharmacists of alcoholic liquors for any purpose, and that every retail druggist should refrain from taking out a liquor permit.—N. A. R. D. J. 1919, v. 28, p. 1264.

Warmoll, F. V.: A note calling attention to the use of toilet waters as beverages in Canada.—Canadian Pharm. J. 1919, v. 53, p. 149.

Anon.: The sale of bay rum in West Virginia, except when denatured, is in violation of the State prohibition law.—Drug & Chem. Markets, 1919, v. 5, No. 35, p. 4.

4. SALE AND USE OF HOUSEHOLD REMEDIES.

McCutcheon, Alexander: Descriptions of some household remedies of the Scotch Highlanders.—Chem. & Drug. 1919, v. 91, No. 16, p. 64; Pharm. J. Lond. 1919, v. 102, p. 235–236.

Beal, J. H.: Report of the Commission on Proprietary Medicines to the American Pharmaceutical Association, August, 1919.—J. Am Pharm. Assoc. 1919, v. 8, p. 1050–1053.

Anon.: Pharmacists are urged to protest against the amendment to H. R. 5123 proposed by the U. S. Public Health Service which would extend the provisions of the bill to blood diseases, ulcers mucous patches, skin diseases, kidney or bladder diseases, etc.—N. A. R. D. J. 1919, v. 29, p. 58.

Anon.: A reprint of requirements which must be complied with in order to retain membership in the Proprietary Association of America.—Am. Druggist, 1919, v. 67, No. 9, p. 22.

O'Hara, F. C. T.: Data showing the alcohol content of patent and proprietary medicines examined at the laboratory of the department of trade and commerce, Ottawa, Canada.—Montreal Pharm. J. 1919, v. 30, p. 9–12.

Anon.: The Anti-Saloon League has been making an investigation with a view to ascertaining to what extent alcohol is necessary in the manufacture and preservation of proprietary medicines.—Bull. Pharm. 1919, v. 33, p. 5.

Anon.: The alcoholic standard adopted by the Proprietary Association provides that preparations made by the manufacturer seeking membership in the association shall not contain a greater amount of alcohol than is necessary to properly hold in solution in permanently active condition the essential constituents of the preparation and to protect against freezing, fermentation, and other deleterious change, and the medication shall be sufficient to render the preparation unsuitable as an intoxicating beverage.—Drug & Chem. Markets, 1919, v. 5, No. 32, p. 7.

Anon.: A report of an investigation of the proprietary medicine business of 208 druggists of New Orleans. The investigation was conducted by the Louisiana State Board of Health and the report originally appeared in a publication put out by the board of health.—Bull. Pharm. 1919, v. 33, p. 14–19.

Anon.: The Goldwater formula-disclosure ordinance was declared invalid by a New York court because it made no provisions for stocks on hand in drug stores. It may, therefore, be expected that attempts to compel the disclosure of formulæ will be made in other parts of the country.—Bull. Pharm. 1919, v. 33, p. 47.

Ladd: A short review of the work which is being done in the State of North Dakota to eliminate patent medicines of no therapeutic value or which are advertised in an objectionable manner.—Proc. North Dakota Pharm. Assoc. 1919, p. 49–56.

Anon.: A reprint of regulations issued by the Governor of Porto Rico for the registration of patent medicines.—Standard Remedies, 1919, v. 5, p. 25.

Anon.: An article calling attention to the disagreeable features of the act recently introduced in the House of Commons of Canada for the purpose of amending the proprietary or patent medicine act of 1908.—Canadian Pharm. J. 1919, v. 52, p. 394.

Xrayser: In a discussion of the trade in patent medicines in England, it is stated that what the pharmacist should contend for is the impossibility of suppressing patent medicines and the consequent desirability of keeping the trade in them in the hands of those who are competent to handle them with the minimum of danger.—Chem. & Drug. 1919, v. 91, No. 22, p. 57.

Editorial: Attention is directed to the number of fake preparations which have been placed on the market purporting to be cures for influenza. It is suggested that it is about time that reputable pharmacy made some definite effort to separate itself from quackery.—Pacific Pharm. 1919, v. 12, p. 209–210.

Dowling, Oscar: A paper discussing the desirability of stating on the labels the quantities of potent ingredients of all ready-made medicines.—J. Am. Pharm. Assoc. 1919, v. 8, p. 412–418.

5. DRUG INSPECTION WORK.

Ballard, C. W.: Data are given showing the condition of a large number of samples of crude drugs purchased in drug stores in New York City.—Proc. New York Pharm. Assoc. 1919, p. 219–226.

Woods, Chas. D.: The results obtained in the examination of a large number of samples of spirit of camphor and spirit of nitrous ether are reported.—Off. Insp. 91, Maine Agric. Exper. Sta. 1919, p. 1–20.

Anon.: Notices of judgment Nos. 6548 and 6550 deal with the shortage in the reported weight of active ingredients in tablets.—S. R. A. Chem. Suppl. 1919, No. 61, p. 51, 55–57.

Jones, A. J.: A presentation of analytical data showing the purity of commercial samples of aspirin and aspirin tablets. The methods of testing are discussed and standards are suggested.—Chem. & Drug. 1919, v. 91, No. 17, p. 60–62.

Boucher, Volcy: A note on quinine tablets in the French colonies, with special reference to their quinine content and solubility.—Bull. sc. pharmacol. 1919, v. 26, p. 66–74.

Zimmermann, Walther: A report of the results of the examination of a number of inferior drugs and some soap substitutes.—Apoth.-Ztg. 1919, v. 34, p. 13–14.

Anon.: A resolution to the effect that the executive or legislative committee of the N. A. R. D. be requested to prepare a suitable draft of a law providing for the inspection of drugs and medicines dispensed by physicians under the same requirements as apply to pharmacists.—N. A. R. D. J. 1919, v. 28, p. 1265.

Beard, J. G.: Recommendations are made for the future form of drug inspection work. The idea is to make the work constructive rather than destructive.—Proc. North Carolina Pharm. Assoc. 1919, p. 53–58; Pacific Pharm. 1919, v. 13, p. 208–211.

Ladd, E. F.: Ninety-three of 218 drug stores inspected in North Dakota during 1918 were given a passing grade.—Bull. North Dakota Agric. Exper. Sta. 1919, v. 5, p. 221.

Barnard, H. E.: Of 811 drug stores inspected, 80 were rated as excellent, 546 good, 141 fair, 31 poor, and 3 bad.—Bull. Indiana Bd. Health, 1919, v. 22, p. 17, 28, 53, 63, 101, 112, 126, and 136.

H. K. Mulford Co.: Of 206 samples of crude drugs examined, 33 were below standard.—J. Am. Pharm. Assoc. 1919, v. 8, p. 758.

Holt, Thomas: Of 95 samples of drugs and medicinal preparations examined, 19 were found to be adulterated.—Rep. Connecticut D. & F. Com. 1919, p. 21.

Bailey, E. N.: Of a total of 46 preparations obtained from druggists, 9 were found to be adulterated or below standard or otherwise illegal.—Rep. Connecticut Agric. Exper. Sta. 1919, Bull. No. 210, p. 242.

Barnard, H. E.: Of 69 samples of drugs examined, 29 were rejected.—Bull. Indiana Bd. Health, 1919, v. 22, p. 29, 41, 53, 77, 89, 100, 112.

Keeny, J. R.: Of 43 samples of drugs examined, only 16 met the requirements of the U. S. P.—Bull. Louisiana Bd. Health, 1919, No. 2, p. 88–90.

Lythgoe, Hermann C.: Of 253 samples of drugs examined, 74 were adulterated.—Bull. Massachusetts Dept. Health, 1919, v. 6, p. 52, 86, 127, 178, 228.

Scofield, Walter W.: A report of analysis of samples of drugs purchased under names recognized by the U. S. P. IX and the N. F. IV, and of others, not thus recognized. Patent medicines have been examined and also toilet waters, of which only 4 out of 176 contained methyl alcohol.—Rep. New Jersey Dept. Health, 1919, p. 85–87.

Jongwald, Mattys: It was found that 50 per cent of drug samples offered for sale in the state of North Dakota are not of the U. S. P. standard.—Proc. North Dakota Pharm. Assoc. 1919, p. 60.

van Buskirk, L. H.: Of 244 samples of drugs examined, 77 were rejected.—Ohio Public Health J. 1919, v. 10, p. 37, 83, 132, 179, 213, 246, 307, 331, 362, 440.

Éwe, G.: Of 206 samples of drugs examined, 33 were below standard.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

6. UNITED STATES PHARMACOPŒIAL CONVENTION.

Kebler, L. F.: Report of the committee on the U. S. Pharmacopœia of the American Pharmaceutical Association. Attention is directed to a number of conditions which should be considered by the next Pharmacopœial Convention.—J. Am. Pharm. Assoc. 1919, v. 8, p. 964–966.

Editorial: In an editorial entitled *One Hundred Years of the U. S. P.*, it is stated that the U. S. Pharmacopœial Convention will maintain its own existence by conservatism, by guarding well the portal of entry to the convention, and by making scientific and practical fitness, rather than geographical representation, requirements for membership.—Midl. Drug. 1919, v. 53, p. 80.

Kebler, Lyman F.: Attention is directed to a number of features which should be considered by the next Pharmacopœial Convention. The subjects discussed are the alcohol question, change of standards, chemical tests, physiological tests, limits of ash and impurities in vegetable drugs, scope, time of official recognition, admittance to the U. S. P. of substitutes for proprietary preparations, nomenclature, and method of editing.—Drug. Circ. 1919, v. 63, p. 483–485, and 497.

7. GENERAL PRINCIPLES TO BE FOLLOWED IN REVISING THE PHARMACOPŒIA.

Committee on Pharmacopœias and Formularies of New Jersey Pharm. Assoc.: In the recommendations submitted for the general principles to be followed in revising the Pharmacopœia, the following are included: That the Pharmacopœia omit geographical designations as far as possible in describing the source of drugs, and that variations due to cultivation, difference in climate or mode of collection be given due consideration in the framing of standards; that the temperature adopted as a standard be 20° C. instead of 25°, as in the present Pharmacopœia; that special consideration be given the necessity for standards for biological products, such as serums and bacterins, and also for the animal organ drugs, such as mammary substance, ovarian substance, and corpus luteum substance; that homeopathic societies be given representation in the Pharmacopœial Convention, and that certain chapters and preparations which commonly appear in homeopathic pharmacopœias be included in the new edition of the U. S. P.—Proc. New Jersey Pharm. Assoc. 1919, p. 65–67.

Kebler, Lyman F.: Standards given in the present Pharmacopœia should not be changed for personal reasons. They should only be changed when better standards are in hand or when the present ones are unsatisfactory.—Drug. Circ. 1919, v. 63, p. 483.

8. PUBLICATION AND CONTROL.

Kilmer, Fred B.: The last edition of the Pharmacopœia was translated into Spanish to meet the needs of Latin America. It is suggested that the coming edition be translated into French. This would make the work available throughout the continent of Europe, where for years to come conditions will preclude the issuance of pharmacopœias or pharmaceutical literature. The U. S. P., in English and in French, coupled with the British pharmacopœia, must certainly dominate the world of pharmaceutical thought.—Proc. New Jersey Pharm. Assoc. 1919, p. 72–73.

9. THE PHYSICIAN AND THE PHARMACOPŒIA.

Anon.: In the report of the committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association, it is stated that comparatively few of the physicians are to-day sufficiently acquainted with the formulas of either the U. S. P. or N. F., in spite of the various propaganda to popularize these works. The publication and distribution of an epitome of each is recommended.—Am. J. Pharm. 1919, v. 91, p. 713.

Kilmer, Fred B.: From a summary of discussions dealing with the attitude of the physician toward the Pharmacopœia, it is concluded that the following may be formulated: the physician trusts that the pharmacist is acquainted with the information contained in the Pharmacopœia. The physician seeks only for information of practical application for himself. Physicians regard the Pharmacopœia as unprogressive, and not representing the advances and innovations constantly put forward by manufacturers and the medical profession. Physicians do not look to the Pharmacopœia as a guide for the value of medicaments. The Pharmacopœia does not contain all medicaments of value. To eliminate from the Pharmacopœia the drugs considered by one class of physicians as of doubtful value, would eliminate many drugs that are much used, and thus lessen the value of the Pharmacopœia to the pharmacist. No pharmacopœia, no rule, or no law can interfere with the practitioner who remains loyal to the old-fashioned drugs or laws of treatment.—Proc. New Jersey Pharm. Assoc. 1919, p. 69–70.

10. VALUE OF CRITICISM.

Kilmer, Fred B.: The criticisms of the Pharmacopœia which follow immediately upon the appearance of a new edition are found for the most part to be very general. Often they are warped. They express only an individual, and at times, a rather narrow view. They are apt to be greatly lacking in directness. At times criticisms, when formulated, amount only to a proof reader's error either in spelling or punctuation, to the transposition of a figure or the misplacement of a decimal. Criticisms of this character are prolific just after a new revision and naturally cease. Constructive criticism that is earnest, that is deep, and that is honest, is helpful and is to be desired. If any fair number of workers in pharmacy and in medicine and in allied arts would formulate painstaking suggestions, it would go a long way towards the betterment and the upbuilding of the work. Criticisms of the Pharmacopœia should come before the revision rather than after. To be helpful they should be constructive rather than destructive. Concise, definite suggestions with brief reasons for the same are what are most desired.—Proc. New Jersey Pharm. Assoc. 1919, p. 71-72.

11. COMMITTEE OF REVISION.

Anon.: A resolution by the Association of American Dairy, Food, and Drug Officials to the effect that the Federal and State drug officials should be more adequately represented on the revision committee of the U. S. P.—N. A. R. D. J. 1919, v. 28, p. 1326.

Committee on pharmacopœias and formularies of New Jersey Pharm. Assoc.: It is recommended that the present method of selecting the revision committee and of revising the Pharmacopœia be continued.—Proc. New Jersey Pharm. Assoc. 1919, p. 65.

Kilmer, Fred B.: The authority for the revision of the Pharmacopœia should not be vested in one man or even in one set of men. We must maintain a system of checks and balances. The authority and responsibility must be divided. We are told that concentration would make for efficiency. On the other hand, concentration would also make for tyranny. Put the making of the Pharmacopœia into the hands of a drug inspector, and it would emerge a set of rigid standards and tests covering the most restricted number of substances. Put the revision in the hands of a physician and he would select a dozen drugs, and enact that these drugs and no others were to be recognized for use in medicine.—Proc. New Jersey Pharm. Assoc. 1919, p. 73.

12. NATURE AND PROGRESS OF REVISION

White, Wm. R.: Since the U. S. Government has seen fit to make the U. S. P. its official organ, it is believed that a smaller revision committee should outline the scope and extent of the work and the various departments of the Government service, which are already so well organized and equipped, should work out the many problems of research that are now confronting pharmacy.—Proc. Tennessee Pharm. Assoc. 1919, p. 36.

Eberle, E. G.: In an editorial it is stated that the U. S. P. is the leading pharmacopœia of the world; that it is so because it is the most representative. For this reason it is thought that the revision by a bureau or department of the United States Government composed of a small body of men out of touch with conditions in all sections of the country, even with an advisory board, would not be as efficient or satisfactory as the thoroughly representative system in use at present. To improve the present system closer cooperation between the Government departments and the committee of revision is recommended.—J. Am. Pharm. Assoc. 1919, v. 8, p. 88-89.

Anon.: The committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association recommends that the present system of revising the Pharmacopœia be continued.—Am. J. Pharm. 1919, v. 91, p. 708.

Gathercoal, E. N.: A summary of a discussion by the Chicago branch of the American Pharmaceutical Association on U. S. P. and N. F. revision.—Drug. Circ. 1919, v. 63, p. 194.

Chase, Charles S.: A discussion of whether or not research work along the lines suggested by the last revision of the Pharmacopœia is possible or practical in schools of pharmacy.—J. Am. Pharm. Assoc. 1919, v. 8, p. 198–200.

Clark, A. H.: An article discussing the agencies and research methods which might be employed in the revision of the Pharmacopœia.—J. Am. Pharm. Assoc. 1919, v. 8, p. 13–16.

2. SCOPE.

1. NATURE AND CONTENT OF THE PHARMACOPŒIA.

Kilmer, Fred B.: The Pharmacopœia must be representative—it must not be formulated for one school of medicine to the exclusion of another, for one state or locality to the exclusion of others It must not be a college text book, or a manufacturer's compendium. It must not tear down or build up one branch of pharmacy or of medicine at the expense of another. It should not be a book of regulations for the use of bureaucratic inspectors. Its foundation must be broad, wide and deep for the people of the realm whose representatives founded and kept it where it is.—Proc. New Jersey Pharm. Assoc. 1919, p. 73.

White, Wm. R.: It is maintained that the U. S. P. should contain standards and formulas for such medicaments as are universally used and prescribed, together with descriptions of diagnostical reagents, chemical tests, assay processes, and other information that will enable the pharmacist to dispense uniform products of the greatest therapeutic value that it is possible to obtain.—Proc. Tennessee Pharm. Assoc. 1919, p. 36.

Anon.: The committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association recommends that the "Scope of the Pharmacopœia" as defined in the U. S. P. IX be retained for the next revision.—Am. J. Pharm. 1919, v. 91, p. 709.

Alther, R.: A discussion of what a pharmacopœia should contain and how the material should be arranged.—Schweiz. Apoth.-Ztg. 1919, v. 56, p. 146–148, 157–160.

Kebler, Lyman F.: The opinion is expressed that substitutes or imitations for proprietary preparations of a meritorious nature should not be included in the U. S. P. under any conditions.—Drug. Circ. 1919, v. 63, p. 485.

Anon.: A note calls attention to the fact that leaflets containing the corrections to the U. S. P. IX are now available for distribution. They may be obtained upon application to the agents of the U. S. P.—N. A. R. D. J. 1919, v. 29, p. 209–210.

2. A LIMITED MATERIA MEDICA.

Kebler, Lyman F.: The opinion is expressed that the medical profession should have the controlling voice in the selection of medicaments to be given recognition in the Pharmacopœia.—Drug. Cir. 1919, v. 63, p. 484.

Sayre, L. E.: A plea for a closer study of pharmaceutical preparations in the light of the criticisms of the medical profession.—J. Am. Pharm. Assoc. 1919, v. 8, p. 409–412.

Anon.: An editorial discussing the responsibilty of the physician and pharmacist for so-called worthless and superfluous medicinal preparations.—J. Am. Pharm. Assoc. 1919, v. 8, p. 778–779.

Grimbert, L.: A review of the decennial consumption of medicines at the Paris hospitals during 1907 to 1917, continuing previous reviews by Regnault (1877), Bourgoin (1888) and the author (1907). Statistics are given showing the relative frequency of use of a large number of remedies.—J. pharm. et chim. 1919, v. 19, p. 377–386.

3. NOMENCLATURE.

Anon.: A note calling attention to the dangers due to the variation in nomenclature of the items in the pharmacopœias of the world.—Chem. & Drug. 1919, v. 91, No. 18, p. 61.

Gathercoal, E. N.: The nomenclature and spelling of the U. S. P. and N. F. should, perhaps, not be accepted with the same idea of standard and legality as the other statements made in these books. However, the weight of opinion favorable to the nomenclature and spelling used in these works should be of such magnitude that the works will be considered standards in these respects.—Drug. Circ. 1919, v. 63, p. 194.

Mittelbach, Wm.: The following changes in U. S. P. nomenclature are suggested: drop the word balsam in the case of balsams of Peru and Tolu to make the titles conform with that of copaiba; change both the Latin and English of "Cascara Sagrada" back to "Rhamnus" and use the present title as a synonym; drop the word "crude" in the title for calcium sulphide; change the title of "Calx" to "Calci Oxidum;" change the titles of the chlorides of alkaloids so that they will read chloride instead of hydrochloride.—Proc. Missouri Pharm. Assoc. 1919, p. 33–37.

Kebler, Lyman F.: All names for the U. S. P. should be carefully chosen to avoid confusion and mistakes. Ferric phosphate, chemically speaking, means a definite compound, but this name in the U. S. P. refers to a mixture of iron phosphate and sodium citrate.—Drug. Circ. 1919, v. 63, p. 497.

Fajans, K.: A discussion of the chaotic state of the nomenclature of the radioactive elements.—Ztschr. f. Elektrochem. 1917, v. 23, p. 250–257, through Sci. Abstr. 1919, v. 22A, p. 23.

Stock, Alfred: Arguments are offered in favor of the general adoption of a proposal to indicate valence by the insertion of figures in parenthesis after the name of the element, e. g. iron (2) sulphate.—Ztschr. angew. Chem. 1919, v. 32, part 1, p. 373–374.

Farwell, O. A.: Suggestions for changes in the botanical nomenclature of the N. F. IV are presented.—Drug. Circ. 1919, v. 63, p. 49–50.

Tschirch, A.: Notes on the origin of plant and drug names. An extensive bibliography is appended.—Schweiz. Apoth.-Ztg. 1919 v. 57, p. 471–476, 491–496, 507–513, 519–525, 531–535, and 543–549.

Zietle, Adolph: A list of common names and synonyms of the more commonly used drugs and medicines.—Pacific Drug Rev. 1919, v. 31, No. 12, p. 20–26.

Zimmermann, Walter: A collection of terms used in "Baden" for folk remedies.—Südd. Apoth.-Ztg. 1919, v. 59, p. 579–580, 593–594; Chem. Zentralbl. 1919, v. 4, p. 980.

Xrayser II: A short account of the origin of the word "dope." It is stated to be derived from the Dutch *doop*, meaning dipping or sauce, which came to be used in the United States as a name for any thick or semifluid article of food and later was applied to medicines of a thick consistence.—Chem. & Drug. 1919, v. 91, p. 45.

Anon.: A book review calls attention to *The Condensed Chemical Dictionary*, compiled and edited by the editorial staff of the Chemical Engineering Catalogue.—Drug. Circ. 1919, v. 63, p. 519.

Anon.: A book review of the eighth enlarged edition of a volume by G. Arends entitled *Volkstümliche Namen der Arzneimittel, Drogen und Chemikalien.*—Pharm. Zentralh. 1919, v. 60, p. 569.

4. PUBLICITY.

Kilmer, Fred B.: In order to increase the popularity of the Pharmacopœia it is suggested that a publicity bureau in behalf of the Pharmacopœia be created upon each recurring revision and that this bureau, through the medical press, through pharmaceutical journals, through the lay press, and through every available channel, express what the Pharmacopœia is and what it means to the people.—Proc. New Jersey Pharm. Assoc. 1919, p. 70–71.

5. TIME OF PUBLICATION.

Kebler, Lyman F.: It is recommended that a period of at least a year should be allowed to elapse between the date of publication of the next U. S. P. and the time when it becomes official.—Drug. Circ. 1919, v. 63, p. 484.

6. DOSES.

Hommell, P. E.: It is suggested that the next U. S. P. should contain a table of maximum, single, and daily doses.—Proc. New Jersey Pharm. Assoc. 1919, p. 41.

Lust, F.: A discussion of formulas for computing dosage for children.—Therap. d. gegenw. 1918, v. 59, p. 401, through Pharm. Zentralh. 1919, v. 60, p. 124.

Heffter, A.: A paper discussing the importance of stating the maximum doses of drugs in the Ph. Germ.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 468–486.

Diner, Jacob: The N. F. IV is criticized because of the difference in the dosage of strychnine alkaloid contained in the various elixirs. It is suggested that it would be more logical to have all preparations of strychnine and strychnine salts of the same strength, so that the physician could more readily remember how much strychnine he is prescribing.—J. Am. Pharm. Assoc. 1919, v. 8, p. 97.

Anon.: A book review of the sixth edition of the Era Dose Book states that doses are given for more than 4,000 substances, more than 1,000 of which are new and were not included in the previous edition.—Drug & Chem. Markets, 1919, v. 5, No. 26, p. 12.

7. ANTIDOTES.

Grier, J.: A paper in which are enumerated the more common poisons and their antidotes. For the purpose of facilitating treatment with the proper antidote, poisons are classified as follows: Class I. Deliriants, irritants, narcotics, volatile oils, fungi, phosphorus, cantharides, prussic acid. Class II. Strong acids, oxalic acid, carbolic acid, strong alkalies.—Chem. & Drug. 1919, v. 91, No. 2043, p. 52–53.

Anon.: The inhalation of alcohol is recommended as an antidote for chlorine poisoning. The inhalation of ammonia is stated to be dangerous.—Pharm. Ztg. 1919, v. 64, p. 582.

Teichmann, E., and Nagel, W.: It is demonstrated that sodium thiosulphate can be used as an antidote to hydrocyanic acid in the case of the mouse. The possibility of its application to man is suggested.—Biochem. Ztschr. 1919, v. 83, p. 312–323.

Tizzoni, J., and Perrucci, G.: A study of the difference in action of cholesterin and of antitetanus serum in strychnine poisoning.—Ann. inst. Pasteur, 1919, v. 33, p. 723–739.

8. WEIGHTS AND MEASURES.

Anon.: The committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association recommends that the weights and measures adopted for the next edition of the U. S. P. be restricted exclusively to the metric system.—Am. J. Pharm. 1919. v. 91. p. 710.

Anon.: Out of 58,226 petitions relating to the exclusive use of metric weights and measures in the United States, now in the keeping of the Bureau of Standards, 57,800, or 99.27 per cent, favor this progress, and only 426, or less than 1 per cent, oppose it.—Am. Perf. 1919, v. 14. p. 328.

Anon.: The American Metric Association at its second meeting, held in Baltimore, December 27, 1918, passed a resolution to the effect that it is the desire of the organization to cooperate more fully with those American industries and trades using or contemplating the use of metric weights and measures.—N. A. R. D. J. 1919. v. 27, p. 602.

Couch, James F.: A short article setting forth Hazlitt's views on the introduction of the metric system into England.—Am. J. Pharm. 1919, v. 91, p. 861–863.

Anon.: A table is given defining French standards and commercial and industrial units as fixed by a recent decree.—J. pharm. et chim. 1919, v. 20. p. 294–302.

Peters, H.: History of the balance of the ancients.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29. p. 64–71.

Schoorl, N.: A description of an exact method for weighing glass apparatus.—Chem. Weekblad. 1919. v. 16. p. 481–483.

Brinton, Paul H. M. P.: A description of a single-deflection method of weighing.—J. Am. Chem. Soc. 1919. v. 41. p. 1151–1155.

Scheringa, K.: An investigation of the effect of surface condensation of water vapor and gases in the production of errors in weighing. Experiments showed that absorption of gases need not be considered a source of error in gravimetric work. Very fine powders may absorb water vapor to a slight extent. The literature on this subject is reviewed.—Pharm. Weekblad, 1919, v. 56, p. 94–107.

Andrews, F. W.: A note on the accuracy of different methods of measuring small volumes of fluid. Volumes of 1 cubic centimeter and 0.5 cubic centimeter can be measured by a pipette with reasonable accuracy. The error in delivering 0.1 cubic centimeter may amount to 5 per cent and the delivery of 0.01 cubic centimeter from a pipette may be exceedingly inaccurate. The drop method of Donald is greatly to be preferred to the pipette method in serological work.—Biochem. J. 1919, v. 13, p. 37–44

Beringer, George M.: An illustrated description of a standard dosage measure.—J. Am. Pharm. Assoc. 1919, v. 8. p. 553–556; Am. J. Pharm. 1919, v. 91, p. 414–419.

Anon.: The committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association recommends that the U. S. P. define and describe standard graduate measures and a standard dosage measure.—Am. J. Pharm. 1919, v. 91, p. 711.

9. ADDITIONS AND DELETIONS.

Anon.: The committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association recommends that the admission of an article to the U. S. P. be based upon its determined general medical use justifying an official standard; that the dismissal of an article be based upon a determination that its general use as a medicine is not sufficient to justify its retention.—Am. J. Pharm. 1919, v. 91, p. 709.

White, Wm. R.: It is believed that the historical matter in the first 80 pages of the Pharmacopœia should be deleted and that the preface, introductory notice, additions, and deletions should be boiled down as low as possible and the table of comparative strengths placed at the end of the book with the other tables.—Proc. Tennessee Pharm. Assoc. 1919, p. 36.

White, Wm. R.: It is suggested that the following be included in the new edition of the U. S. P.: acetylsalicylic acid, Dakin's solution, an ointment of the ambrine type, standards for flavoring extracts established by the U. S. Department of Agriculture, a formula for specially denatured alcohol which druggists are permitted to sell in quantities not exceeding one pint. It is also recommended that there be given in the Pharmacopœia a definition of poisons and designations of what substances are poisonous, including the best antidote for the same. Maximum, as well as average, doses should be given.—Proc. Tennessee Pharm. Assoc. 1919, p. 38.

Mittelbach, Wm.: It is recommended that the following be deleted from the U. S. P.: Ceylon cinnamon, belladonna leaves, beta-eucaine hydrochloride, chromium trioxide, chlorinated lime, and precipitated calcium carbonate. It is recommended that codeine hydrochloride be added to the U. S. P.—Proc. Missouri Pharm. Assoc. 1919, p. 34–36.

McElhenie, Thomas D.: It is suggested that codeine hydrochloride be made official because of its greater solubility and greater alkaloidal content.—Proc. New York Pharm. Assoc. 1919, p. 54.

DuBois: Report of the subcommittee on glycerophosphates. It is recommended that iron glycerophosphate be admitted to the U. S. P. with the description, tests, and assay as given in the N. F. IV, except that the iron content be fixed at not less than 13 per cent nor more than 15 per cent.—Proc. Am. Drug. Mfg. Assoc. 1919, p. 278–280.

Hommell, P. E.: It is recommended that the following be admitted to the U. S. P.: Elixir of iron, quinine, and strychnine, liniment of aconite and chloroform, agar-agar preparations of therapeutic value, troches of ammonium chloride and cubeb, and troches of red gum.—Proc. New Jersey Pharm. Assoc. 1919, p. 40, 41, 48, and 49.

10. PURITY AND STRENGTH.

Gathercoal, E. N.: In a discussion of U. S. P. and N. F. revision by the Chicago branch of the American Pharmaceutical Association, it was concluded that the maximum-minimum standard for drugs and chemicals, and especially for finished preparations of drugs, should be discontinued and a single standard adopted instead. A sufficient tolerance from the standard is always allowed by courts and authorities.—Drug. Circ. 1919, v. 63, p. 194.

Anon.: The committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association believes that the monographic presentation of standards for drugs, chemicals, and preparations in alphabetical sequence, as followed in the U. S. P. IX, is the best that can be devised for reference and clarity of presentation of the subjects.—Am. J. Pharm. 1919, v. 91, p. 709.

11. ATOMIC WEIGHTS.

Thorpe, T. E.: A brief review of the development of our knowledge concerning atomic weights, with reference to the recent work of Smith and van Hoagen on the determination of the atomic weights of boron and fluorine.—Nature, London, 1919, v. 103, p. 346–348.

Clarke, F. W., et al.: Report of the International Committee on Atomic Weights for 1919 and 1920. A summary is also given of the determinations published since the last regular report made in 1916.—J. Am. Chem. Soc. 1919, v. 41, p. 1881–1887.

Anon.: The committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association recommends that the atomic and molecular weights employed in the next revision of the U. S. P. be those given in the latest available report of the International committee on atomic weights.—Am. J. Pharm. 1919, v. 91, p. 710.

Soddy, Frederick: A paper on the conception of the chemical element as enlarged by the study of radioactive changes.—J. Chem. Soc. Lond. 1919, v. 115, p. 1–26.

Collins, Hawksworth: Mathematical proof is given to the effect that the atomic weights are integers when oxygen is taken as 16.—Chem. News, 1919, v. 119, p. 247–248.

Szynanowitz, Raymond: From the table of elements arranged in the order of their atomic weights it is concluded that all elements originated from 2 primary substances, having atomic weights of 1 and 3, and upon condensation would combine to form helium and ultimately all of the elements with which we are familiar.—Chem. News, 1919, v. 119, p. 58–59.

Schmitz, E.: Harmony of the atomic weights. Calculations of the numerical relationship between the atomic weights of the elements are given.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 504–518.

Wegscheider: A reply to F. Paneth concerning atomic weight tables and the separation of the chemical elements.—Ztschr. physik. Chem. 1919, v. 93, p. 380–381; Chem. Abstr. 1919, v. 13, p. 2471.

Guye, P. A., and Renard, T.: A discussion of the disagreement between the errors of the determination of atomic weights on the average and the laws of calculating probabilities.—Chem. Abstr. 1919, v. 13, p. 390.

Stern, O., and Volmer, M.: A report of studies to determine if the divergencies of the atomic weights from integers are explainable by isotopy.—Ann. Physik. 1919, v. 59, p. 225–238.

Guye, P. A.: A correction in the determination of the density of HBr gives the value of 79.920 for the atomic weight of bromine, and 107.870 for that of silver.—J. chim. phys. 1919, v. 17, p. 171–186.

Bürki, Fr.: A new experiment is described for demonstrating the small mass of the hydrogen atom.—Helvetica Chim. Acta, 1919, v. 2, p. 703–704.

Smith, Edgar F., and van Haagen, Walter K.: Data obtained in the determination of the atomic weights of boron and fluorine are presented. The atomic weight of boron was found to be 10.900 and of fluorine 19.005.—Carnegie Inst. Pub. 1918, No. 267, p. 1–63, through Chem. Abstr. 1919, v. 13, p. 3044.

Bilecki, Alois: Analytical data obtained in the determination of the atomic weight of iron are presented. In two series of determinations the figures 55.900 and 55.883 were obtained.—Ztschr. anorg. Chem. 1919, v. 108, p. 318–320.

Hönigschmid, O.: An account is given of a series of atomic weight determinations of thorium-lead and scandium. The mean value for thorium-lead was found to be 207.90±0.013, and the mean value for scandium 45.099±0.014.—Ztschr. Elektrochem. 1919, v. 25, p. 91–97, through Chem. Abstr. 1919, v. 13, p. 2621.

12. CHEMICAL FORMULAS.

Anon.: The committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association believes that the method of stating chemical formulas adopted for the U. S. P. IX is well suited for the purpose and should be followed, with slight modifications, in the next revision.—Am. J. Pharm. 1919, v. 91, p. 710.

Lowry, Alexander: A note on modified graphic formulas for organic cyclic compounds. Illustrated.—J. Am. Chem. Soc. 1919, v. 41, p. 1029–1030.

3. NONPHARMACOPŒIAL STANDARDS.

1. FORMULARIES—GENERAL.

Anon.: An editorial states that the N. S. W. committee on the new edition of the Australian Pharmaceutical Formulary has taken an important step in endeavoring to secure the cooperation of hospitals and dispensaries in the process of revision.—Chem. & Drug. Australas. 1919, v. 34, p. 422.

2. NATIONAL FORMULARY.

Committee on pharmacopœias and formularies of New Jersey Pharm. Assoc.: The opinion is expressed that the time is ripe for the cooperation of a committee of active medical practitioners in the revision of the National Formulary. Such cooperation of the medical societies should be solicited by the American Pharmaceutical Association, which owns and controls this publication, and should be given by the formation of a committee composed of practicing physicians acquainted with medical customs and usages.—Proc. New Jersey Pharm. Assoc. 1919, p. 67.

Scoville, Wilbur L.: A number of suggestions for the revision of the National Formulary.—J. Am. Pharm. Assoc. 1919, v. 8, p. 745–746.

Diner, Jacob: A criticism of a number of N. F. formulas from a pharmacological viewpoint. It is stated that before physicians can be expected to use the N. F., its formulas must be simplified and standardized and the irrational formulas eliminated.—J. Am. Pharm. Assoc. 1919, v. 8, p. 94–98.

Hommell, P. E.: A formula for troches of benzoic acid should be introduced in the N. F., as this acid in palatable form is an effective expectorant, analgesic and antiseptic. Beringer's formula for troches of chloroform compound should also be included.—Proc. New Jersey Pharm. Assoc. 1919, p. 49.

3. RECIPE BOOK.

Raubenheimer, Otto: Report of the committee on Recipe Book of the American Pharmaceutical Association.—J. Am. Pharm. Assoc. 1919, v. 8, p. 979.

Miller, H. L.: Formulas for making a variety of preparations are given.—Spatula, 1919, v. 26, p. 97–98.

Anon.: A list of new English formulas for a variety of medicinal preparations.—Spatula, 1919, v. 26, p. 107–108.

Anon.: A list of popular formulas for a variety of medicinal and other preparations.—Am. Druggist, 1919, v. 67, No. 5, p. 31–32.

Fleissig: Sixty-nine magistral formulas used in prescribing for patients receiving benefits from the sick fund are presented.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 273–277.

Anon.: Formulas for the preparation of eye waters are given.—J. pharm. et chim. 1919, v. 20, p. 174.

Anon.: Six formulas for the preparation of glycerites are presented.—J. pharm. et chim. 1919, v. 20, p. 207–208.

Anon.: Formulas for making a variety of preparations are given.—Am. Drug. 1919, v. 67, No. 12, p. 45.

4. NEW AND NONOFFICIAL REMEDIES.

Anon.: A book review calls attention to *New and Nonofficial Remedies* for 1919 published by the American Medical Association.—Pharm. J. Lond. 1919, v. 103, p. 44.

SYNTHETICS.

Schieffelin, W. J.: The organization of an international commission to pass on the value of synthetic drugs is proposed.—Am. Druggist, 1919, v. 67, No. 4, p. 28.

Leech, Paul N., et al: American-made synthetic drugs. II. An examination of procaine (novocaine), barbital (veronal), phenetidyl-acetphenetidine (holocaine), phenylcinchonic acid (atophan), manufactured under Federal Trade Commission licenses.—Rep. Chem. Lab. Am. M. Assoc. 1919, v. 12, p. 7–20.

Messner, J.: An address dealing with the more important synthetic medicinal preparations which appeared during the past four years.—Ztschr. angew. Chem. 1919, v. 32, part 1, p. 381–385, 393–396.

Anon.: A list of new proprietary and synthetic remedies, with brief descriptions of the items mentioned.—Am. Druggist, 1919, v. 67, No. 3, p. 31.

Heyl, G.: A discussion of the value of dyestuffs as medicinal agents.—Color Trade J. 1919, v. 4, p. 73–76, through Chem. Abstr. 1919, v. 13, p. 1101.

Grau, Chas. A.: A contribution to the chemistry of thiocol, potassium guaiacol-sulphonate.—Bull. sc. pharmacol. 1919, v. 26, part 2, p. 97–105, 197–203.

Nagai, Nagayoshi: British patent No. 120,936 describes the synthesis of ephedrine. The synthetic product differs in constitution from Fourneau's ephedrine, and is the racemic form of natural ephedrine.—J. Chem. Soc. Lond. 1919, v. 116, part 1, p. 92.

Anon.: A book review of the second edition of *The Chemistry of Synthetic Drugs* by Percy May states that this volume has been well received from the first, and that it bids fair to become a standard.—Pharm. J. Lond. 1919, v. 102, p. 44.

Anon.: A book review of the fourth enlarged and revised edition of a volume by Sigmund Fränkel entitled *Die Arzneimittel-synthese*.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 632.

Anon.: A book review calls attention to a volume by Arthur R. Warns entitled *Coal Tar and Some of Its Products*.—Drug & Chem. Markets, 1919, v. 5, No. 35, p. 12.

NEW REMEDIES.

Anon.: Short descriptions are given of some new remedies of recent origin.—Pharm. Weekblad, 1919, v. 56, p. 1609–1616, 1705–1708.

Anon.: A list of new remedies, with short descriptions of their composition and properties.—Südd. Apoth.-Ztg., 1919, v. 59, p. 34, 46, 163–164, 405, 566–567, 616–617, through Chem. Zentralbl., 1919, v. 90, p. 55, 552, 982, 1022.

Anon.: The composition and uses of a large number of new remedies and pharmaceutical specialities are discussed.—Pharm. Ztg. 1918, v. 63, p. 590, 629; ibid. 1919, v. 64, p. 41, 84, 90, 102–103, 248–249, 295, 320, 380–381, 408–409, 447–448, 472, 528–529.

Anon.: Data on the composition and uses of a number of new remedies are given.—Spatula, 1919, v. 26, p. 106.

Heger, Hans: Notes on the composition of some of the new remedies and pharmaceutical specialities which appeared in the first half of 1918.—Pharm. Post, 1918, v. 51, p. 777–779, through Chem. Zentralbl. 1919, v. 2, p. 302–303.

Anon.: An alphabetical list of recently introduced remedies, including short descriptions of the preparation and properties of the items mentioned.—Proc. New York Pharm. Assoc. 1919, p. 202–216.

Messner, J.: A concise report on the more important new remedies introduced during the period 1915 to 1919, with special reference to their constitution and therapeutic use.—Ztschr. angew. Chem. 1919, v. 32, p. 381–385, 393–396.

Rabow, S.: A review of the new remedies, including specialties and patent medicines, introduced during the year 1918.—Chem. Ztg. 1919, v. 43, p. 73–75, 87, 99–101.

Macht, David I.: Experimental data relative to the anthelmintic action of benzyl alcohol and benzyl esters are presented.—J. Pharmacol. & Exper. Therap. 1919, v. 14, p. 323–326.

Haughwout, Frank G. and Asuzano, M. A.: Good results following the administration of benzyl benzoate are reported in a case of lymphatic leucemia.—New York M. J. 1919, v. 110, p. 180–183.

Haughwout, Frank G., et al: A report on the use of benzyl benzoate in the treatment of protozoal dysentery. The results obtained in 8 cases of endamebic dysentery and 1 case of bacillary dysentery indicate that the drug is a valuable auxiliary in the treatment of these diseases.—Arch. Int. Med. 1919, v. 24, p. 383–397.

Boice, J. Morton: A résumé of the work done by various observers on benzyl benzoate, the new non-narcotic antispasmodic. Its apparent non-toxicity warrants an extended trial.—New York M. J. 1919, v. 110, p. 977–982.

Macht, David I.: A therapeutic study of benzyl benzoate in bronchial spasm or asthma, with a report of cases.—Southern Med. J. 1919, v. 12, p. 367–371.

Cow, D.: Pertonal (p-acetyl amidoethoxybenzene) is an antipyretic having a similar constitution to that of phenacetin. It is stated to possess only half the toxicity of the latter and twice its antipyretic power.—J. Pharmacol. & Exper. Therap. 1919, v. 12, p. 343–359.

Hortsman, Gustav: The preparation of mercury formamide for subcutaneous injection is described.—Proc. New York Pharm. Assoc. 1919, p. 223–234.

Roger, Leonard: A brief description of a method for the preparation of sodium morrhuate.—Brit. M. J. 1919, v. 2, p. 426; Pharm. J. Lond. 1919, v. 103, p. 434.

Rogers, Leonard: Notes on the use of sodium morrhuate in the treatment of tuberculosis—Brit. M. J. 1919, v. 1, p. 147–148.

Fleissig: A book review calls attention to the second edition of *Gehe's Codex* published in 1914 and to the supplement published in 1918.—Schweiz. Apoth.-Ztg. 1919, v. 56, p. 197.

Anon.: A review of a volume by G. Arends on new remedies and pharmaceutical specialties, including organ preparations and serums.—Pharm. Weekblad, 1919, v. 56, p. 1588.

PATENTS AND TRADE-MARKS.

Neiman, Howard S.: An article explaining the present status of the trade-mark laws.—Am. Perf. 1919, v. 14, p. 197–199.

Francis, J. M.: The report of the committee on patents and trademarks of the American Drug Manufacturers Association is a protest against the movement to eliminate the product patent in so far as it pertains to discoveries in medicine, pharmacy, and chemistry.—Proc. Am. Drug Mfg. Assoc. 1919, p. 151–162; J. Am. Pharm. Assoc. 1919, v. 8, p. 521.

Stewart, F. E.: Report of the committee on patents and trademarks of the American Pharmaceutical Association.—J. Am. Pharm. Assoc. 1919, v. 8, p. 154–157, 1089–1093.

Thomson, Henry C.: A paper discussing the origin of trade marks and protection.—Proc. Am. Drug Mfg. Assoc. 1919, p. 124–145.

Stroud, Sydney H.: A discussion of some of the bad features of the use of trade names.—Chem. & Drug. Australas. 1919, v. 34, p. 171–172.

Anon.: A reprint of Treasury Decision 38035, giving the new regulations governing the recording of trade-marks and trade names registered in the United States Patent Office.—Am. Perf. 1919, v. 14, p. 124.

Barber, Arthur W.: A discussion of the advisability of providing for divided ownership in trade-marks.—Drug & Chem. Markets, 1919, v. 5, No. 30, p. 5–6.

Anon.: It is stated that the United States protects the owners of patents and copyrights, but there is no national law regulating the use and right to trade-marks. The owner can register his emblem at Washington, but no guaranty of protection goes with this perfunctory proceeding. State courts have been in hopeless disagreement, and the United States Supreme Court has gone so far as to allow the same trade-mark to be used by different companies when their fields of operation did not overlap. It is therefore thought that a national law is needed.—Drug & Chem. Markets, 1919, v. 5, p. 3.

Anon.: A short review pointing out the salient features of the trade-mark laws of South American countries.—Drug & Chem. Markets, 1919, v. 5, No. 26, p. 6–7.

Anon.: In a discussion of the future of the patent and trade-mark situation with respect to foreign products, it is stated that German owners undoubtedly transferred to their American representatives the right to manufacture in the United States. Under the trading with the enemy act the United States Government seized these rights and leased them to American companies, with the exception of the names of the products. Owing to this exception there is likely to be German competition in these products after a treaty of peace is signed and a fierce fight for supremacy will result.—Drug & Chem. Markets, 1919, v. 4, No. 22, p. 3–4.

Baekeland, L. H.: Report of the patent committee to the National Research Council.—J. Ind. & Eng. Chem. 1919, v. 11, p. 250–253.

Editorial: Some needed reforms in the Patent Office are pointed out.—J. Ind. & Eng. Chem. 1919, v. 11, p. 183–184.

Ewing, Thomas: An address pointing out the needs of the U. S. Patent Office.—J. Ind. & Eng. Chem. 1919, v. 11, p. 237–239.

Anon.: With respect to the rights of the Bayer Co. in connection with the name "aspirin," the Patent Office has ruled that the manner in which the name was applied to the product did not constitute a legal trade-mark and asks that its registration as such be canceled.—Midl. Drug. 1919, v. 53, p. 15.

Anon.: In an editorial it is stated that there could be no better commentary upon the justice of the "avoidance" of the British and Australian registrations of the word "aspirin" as German-owned trade-marks than the cancellation of the name as a trade-mark in the United States of America.—Chem. & Drug. 1919, v. 91, p. 52.

Anon.: French patent and trade-marks.—Rev. prod. chim. 1919, v. 22.

Anon.: New Swiss patents for medicinal and related products.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 438–439.

CHEMOTHERAPY.

Giemsa, G.: A review of some of the recent advances in experimental chemotherapy.—Arch. Pharm. 1919, v. 257, p. 190–212.

McDonagh, J. E. R.: The new chemotherapy in its relation to drugs.—Presse médicale, 1918, p. 612–613.

Matsunaga, T.: An experimental study of the bactericidal action of copper and silver *in vivo*.—Centralbl. f. Bakteriol. (Orig.) 1919, v. 82, p. 311–317.

von Linden, Gräfin: A general discussion of the copper compounds used in chemotherapy and their applications.—Therap. Monatsh. 1919, v. 33, p. 13.

Mueller, John H.: A study of the comparative toxicity of triphenylmethane and flavine dyes for tissues and bacteria.—J. Path. & Bact. 1919, v. 22, p. 308–318.

Neufeld, F., and Schiemann, O.: A report of chemotherapeutic experiments with acridine dyes—trypaflavine, 3, 6-diaminoacridine base, 3, 6-diaminoacridine nitrate and 3, 6-diaminoacridine sulphate.—Deutsch. med. Wchnschr. 1919, v. 45, p. 844–846; Ztschr. Biochem. u. Biophys. 1919, v. 21, p. 544.

Bohland, K.: A discussion of the value of intravenous injections of trypaflavine in various infectious diseases.—Deutsch. med. Wchnschr. 1919, v. 45, p. 797.

Horst, M. D.: A review of the development of the use of antimony compounds in protozoan infections followed by a study of the effect of antimony trioxide on rabbits and guinea pigs infected with *Trypanosoma brucei*.—Folia Microbiol. 1918, v. 5, p. 126–140, through Abstr. Bact., 1919, v. 3, p. 144.

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11. DIAGNOSTICAL REAGENTS AND CLINICAL TESTS.

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Hommell, P. E.: It is suggested that deodorized alcohol should replace the commercial alcohol in at least the compound spirits of orange, aromatic elixir and tincture of cardamom compound, as it would tend to improve the aroma of these valuable agents so largely exhibited to render medication palatable. An alcohol absolutely free of fusel-oil constituents and other by-products is the only one which should be employed in the making of elixirs and similar preparations where palatability and delicate flavor is desirable.—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

Anon.: A reprint of a Treasury decision in which the standards adopted by the Bureau of Internal Revenue for alcoholic preparations containing nonbeverage alcohol are given.—Drug & Chem. Markets, 1919, v. 5, p. 13–14.

Anon.: A list of U. S. P. and N. F. preparations which have been or may be used as beverages submitted to representatives of the drug industries by the Bureau of Internal Revenue.—J. Am. Pharm Assoc. 1919, v. 8, p. 1120.

Raymer, Wm.: An article discussing the preparation and care of homeopathic remedies.—Hahnemann. Month., 1919, v. 54, p. 158–163.

Heffter and Juckenack: The use of propyl alcohol as a substitute for ethyl alcohol in medicinal preparations intended for external use is suggested.—Vrtljschr. f. Ger. Med. u. öffentl. Sanitätswesen, 1919. v. 58, p. 1–3, through Chem. Abstr. 1920, v. 14, p. 590.

Enrico, Peiro: Notes on the use of acacia in pharmaceutical preparations.—Boll. chim.-farm. 1919, v. 58, p. 433–435.

Francis: A discussion of diluents and excipients with reference to their employment in the manufacture of pharmaceutical preparations.—Proc. Am. Drug Mfg. Assoc. 1919, p. 270–274.

Jordan, F. M.: Modified formulæ for the soap preparations of the U. S. P. are presented and discussed.—Am. J. Pharm. 1919, v. 91, p. 83.

Toplis, William G.: A description of a method for testing the alcoholic strength of pharmaceuticals. The method consists of salting out the alcohol with anhydrous potassium carbonate and measuring the alcoholic layer.—J. Am. Pharm. Assoc. 1919, v. 8, p. 803–804.

Stadlmayr, F.: A discussion of the method of the Ph. Brit. for the determination of permissible amounts of arsenic and lead in pharmaceutical preparations.—Ztschr. anal. Chem. 1919, v. 58, p. 568–576.

Richmond, H. Droop: Notes on the percentage of oil in "malt extract and cod liver oil." The minimum standard should be 15 per cent by volume (equal to 10.4 per cent by weight) for cod liver oil in malt and oil preparations unless a definite percentage is stated on the label.—Analyst (The), London, 1919, v. 44, p. 202.

Anon.: A book review of a volume by Karl Dieterich entitled *Neues Pharmazeutisches Manual*. This is the twelfth revised edition.—Pharm. Zentralh. 1919, v. 60, p. 357.

Anon.: A book review calls attention to a volume by Edsel A. Ruddiman entitled *Pharmacy, Theoretical and Practical, Including Arithmetic of Pharmacy*.—Pharm. J. Lond. 1919, v. 102, p. 347.

Anon.: A book notice calls attention to the 1919 edition of the *Formulæ Magistrales Berolinenses*.—Pharm. Ztg. 1919, v. 64, p. 124–125.

1. GENERAL FORMULAS.

Anon.: The committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association recommends that the use of general formulas be extended wherever practicable in the case of other classes of preparations in order to economize space and cost of publication of the U. S. P.—Am. J. Pharm. 1919, v. 91, p. 711.

2. STANDARDIZATION.

Kremers, Edward: A discussion of pharmaceutical standards, past and present. The value of monographs in connection with the fixing of standards for different galenical preparations is emphasized, and attention is directed to the card system as a means of disseminating information concerning standards.—J. Am. Pharm. Assoc. 1919, v. 8, p. 124–125.

Dohme, A. R. L.: A review of the work of the committee on standardization and deterioration of the American Drug Manufacturers' Association.—Proc. Am. Drug Mfg. Assoc. 1919, p. 230–240.

Scoville, Wilbur L.: The wisdom of standardizing pepsin preparations is debatable at the present time, since the conditions of permanency in solutions of pepsin are not yet known. It is, however, desirable to make the different liquid preparations of pepsin more uniform with respect to acidity. This question should receive considerable attention in the next revision of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

3. GALENICALS.

Kunz-Krause, H.: Notes on the character of the so-called distillates of galenical preparations.—Apoth.-Ztg. 1919, v. 34, p. 259–260.

Eschbaum, F.: A description of a new method for the determination of extractive matter in tinctures and fluidextracts. The difficulty of obtaining concordant and accurate results in determining the solid matter in tinctures and fluidextracts by the usual methods of drying are overcome by drying the liquid on filter paper according to the author's method.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 417–419, through J. Soc. Chem. Ind. 1919, v. 38, p. 157A.

Ruddiman, Edsel A.: A paper pointing out the function of glycerin in some U. S. P. and N. F. preparations.—J. Am. Pharm. Assoc. 1919, v. 8, p. 819–824.

McElhenie, Thomas D.: It is suggested that 1 per cent by volume of hydrochloric acid be added to the menstrum in the manufacture of cinchona preparations.—Proc. New York Pharm. Assoc. 1919, p. 54.

Murray, B. L.: Because of limited shipping facilities as a result of the war in Europe, the Javanese supply of coca leaves was cut off and the South American leaves again came into the market. As the two differ somewhat in nature, it became necessary to change the processes for the manufacture of coca leaves preparations.—Am. Druggist, 1919, v. 67, No. 1, p. 88.

Scoville, Wilbur L.: A second paper dealing with the permanence of alkaloidal fluidextracts and tinctures. Analytical data showing the degree of deterioration are presented in the form of a table.—J. Am. Pharm. Assoc. 1919, v. 8, p. 799–803.

Hommell, P. E.: The U. S. P. and N. F. should say something about the preservation of pills, and should direct that all iron and mercurial salts be kept in well-stoppered blue or amber-colored containers.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

Kilmer, Fred B.: From experiments, it is concluded that there is no deterioration of plasters containing alkaloids for the period of time in which the integrity of the plaster holds good.—Proc. Am. Drug Mfg. Assoc. 1919, p. 241–242.

A. H.: A note calls attention to the deterioration of arsenic pills due to the action of a green mold, which was identified as *Aspergillus glaucus*. The As_2O_3 was reduced to $AsH(C_2H_5)_2$, the odor of which was quite evident.—Pharm. Ztg. 1919, v. 64, p. 650, through Chem. Zentralbl. 1919, v. 4, p. 1021.

Heffter, A.: An investigation of the stability of sterilized solutions preserved in ampoules, with special reference to strophanthin solutions and solutions of caffeine sodio-salicylate.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 142–146.

4. INCOMPATIBILITY.

Robinson, William J.: An alphabetical summary of prescription incompatibilities.—Critic and Guide, 1919, v. 22, p. 91–107.

Linton, Arthur W.: Notes on some prescription difficulties with special reference to combinations of other drugs with aspirin.—Pacific Drug Rev. 1919, v. 31, p. 30.

Griffith, Ivor: A résumé of the nature and incompatibilities of some of the newer remedies.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 268–270.

Anon.: A note calls attention to the incompatibility of berberine hydrochloride with protargol.—N. A. R. D. J. 1919, v. 28, p. 1172.

L. V.: Notes on some incompatibilities. The incompatibility of preparations containing morphine with ammonium hydroxide is mentioned, also the incompatibility of codeine salts with potassium iodide.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 65–66.

Plenderleith, J. W.: A note calls attention to the incompatibility of solutions of alkaloids with fluidextract of glycyrrhiza. The precipitate formed under these conditions consists of the glycyrrhizinate of the alkaloid.—Pharm. J. Lond. 1919, v. 102, p. 236.

Terry, R. W.: A study of an incompatibility in a prescription containing mercuric benzoate, cocaine hydrochloride, and sodium chloride in an aqueous medium.—Midl. Drug. 1919, v. 53, p. 222–225.

Anon.: The incompatibility of strontium bromide with sodium salicylate is reported on. Strontium salicylate is formed and precipitates as a result of its slight solubility in water.—Am. Druggist, 1919, v. 67, No. 1, p. 41.

Paderi, C.: Attention is called to the physiologic incompatibility of calomel with antipyrine. The toxic symptoms produced by the administration of a mixture of these substances is thought to be due to the formation of a soluble combination of mercury and antipyrine in the alkaline medium of the intestines. An abstract.—Pharm. Weekblad, 1919, v. 56, p. 1310.

Griffith, Ivor: A book review of a volume by W. G. Robinson entitled *A Treatise on Prescription Incompatibility, Including Prescription Oddities and Curiosities.*—J. Am. Pharm. Assoc. 1919, v. 8, p. 596–597.

Anon.: A book review of a volume by E. W. Lucas entitled *First Lines in Dispensing.*—Pharm. J. Lond. 1919, v. 102, p. 425.

5. EXTRACTION.

Couch, James F.: An article dealing with the early history of percolation.—Am. J. Pharm. 1919, v. 91, p. 16–25.

Goris, A.: A history of the development of percolation and of its application to the extraction of drugs.—Bull. sc. pharmacol. 1919, v. 26, p. 465–481.

Beard, J. G.: A preliminary report on a modified process of percolation adapted to the preparation of fluidextracts. The method in essential detail is a process for continuous percolation under reduced pressure.—Am. Druggist, 1919, v. 67, No. 1, p. 31.

6. STERILIZATION.

Hommell, P. E.: The U. S. P. chapter on sterilization is excellent, but it is believed that it should be made more comprehensive in the next revision as the application of modern methods of sterilization is important to the pharmacist. The most concise directions should be given for the sterilization of the many galenical and surgical supplies which he is called upon to handle and dispense.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

Anon.: A review of a work by L. M. Lansberg on the bacterial flora of medicines and of a thesis by Réne Durand on the same subject. The review gives the results of these investigations in considerable detail.—Pharm. Weekblad, 1919, v. 56, p. 1471–1477.

Pond, Samuel E.: An investigation of the efficiency of current methods used in the sterilization of dental instruments and of root filling materials.—J. Nat. Dental Assoc. 1919, v. 6, p. 350–362, through Chem. Abstr. 1919, v. 13, p. 1219.

Anon.: In a second installment of an article entitled *Informal Talks on Bacteriology*, the subject of sterilization is discussed at some length.—Bull. Pharm. 1919, v. 33, p. 65–67.

Lénard: A description of a method for sealing containers so that the sterilized contents will remain free from organisms.—Pharm. Zentralh. 1918, p. 252, through Schweiz. Apoth.-Ztg. 1919, v. 56, p. 141.

Hart, E. J.: Notes on the sterilization of solutions of sodium bicarbonate. The sterilization of this solution is difficult on account of the necessity of guarding against the loss of CO_2. Sterilization conducted in a Koch's steam sterilizer was found to be the most satisfactory.—Pharm. J. Lond. 1919, v. 102, p. 53–54.

Anon.: A method for the sterilization of iodoform intended for use in the making of iodoform paste and similar preparations is described.—Pharm. J. Lond. 1919, v. 102, p. 12.

Zoccola, Francesco: A study of the changes which take place in morphine, apomorphine, and cocaine solutions during sterilization.—Giorn. farm. chim. 1918, v. 67, p. 60–64, 80–86.

Fleissig: A book review calls attention to the third edition of a volume by C. Stich on bacteriology and sterilization as related to pharmacy. The work is entitled *Bakteriologie und Sterilisation im Apothekerbetrieb*.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 26.

7. FORMS OF ADMINISTRATION.

Boriani, L.: A review of the various forms of medication mentioned in the collected writings of Hippocrates.—Boll. chim.-farm. 1919, v. 58, p. 352–358, 376–382.

Nitardy, F. W.: Notes on the suspension of solids in liquids, with special reference to suspensions in oil intended for injection.—J. Am. Pharm. Assoc. 1919, v. 8, p. 961.

Stern, Louis: Notes relative to the value of the intravenous method of drug administration and a report of the intravenous use of iron and arsenic in over 100 cases.—Med. Rec. 1919, v. 96, p. 14–15.

Crouzel, Ed.: A classification of the ingredients of topical preparations.—J. pharm. et chim. 1919, v. 19, p. 67–68.

Cesaris, Vittorio: Notes on the origin and evolution of antiseptic dressings.—Boll. chim.-farm. 1919, v. 58, p. 163–166, 202–204, 223–227.

Anon.: A presentation of modern methods for the preparation of gelatin capsules and their analysis.—Farm. Españ. 1919, v. 51, p. 344–345, 360–361.

Bouvet, M.: Historical notes on the preparation and use of eye disks by Roman oculists.—Bull. sc. pharmacol. 1919, v. 26, p. 28–32.

Bouvet, M.: A brief historical résumé of the development of the preparation of drugs in tablet form.—Bull. sc. pharmacol. 1919, v. 26, p. 23-28.

van Itallie, E. I.: Notes on the preparation of compressed tablets. General directions for making tablets of different classes of materials are given.—Pharm. Weekblad, 1919, v. 56, p. 1717-1720.

Bouvet, M.: Formulas are given of the composition of various types of tablets containing phenolphthalein for medicinal use. A list is also given of the phenolphthalein derivatives that may be present in tablets.—Bull. sc. pharmacol. 1919, v. 26, p. 281-288.

Anon.: A discussion of R. C. White's article on the manufacture of aspirin tablets.—Chem. & Drug. 1919, v. 91, No. 3, p. 47.

Emery, W. O.: Studies in synthetic drug analysis. VIII. Data on the estimation of monobromated camphor in migraine tablets.—J. Ind. & Eng. Chem. 1919, v. 11, p. 756-757.

Boucher, V.: Notes on the analysis and solubility of quinine tablets sold in the French colonies.—Bull. sc. pharmacol. 1919, v. 26, p. 66-74.

Anon.: A book review of a volume on tablet manufacture by M. Bouvet is entitled *La fabrication industrielle des compriemés pharmacetiques.*—Bull. sc. pharmacol. 1919, v. 26, p. 44.

Hommell, P. E.: Most of the troches in the U. S. P. and N. F. are of value and should be retained. Physicians oftentimes prescribe these elegant pharmaceuticals and the laity calls for them because they are palatable and effective. There is no reason why the pharmacist should not produce them and reap the benefit.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

Bonnet: Formulas are given for making ointments and suppositories using lanolin as a base.—Practioner (The), London, 1919, v. 102, p. 284-285.

II. INTERNATIONAL STANDARDS.

1. EVOLUTION OF UNIFORMITY IN PHARMACOPŒIAL STANDARDS FOR POTENT MEDICAMENTS.

Anon.: The committee on pharmacopœias and formularies of the New Jersey Pharmaceutical Association recommends that the U. S. Pharmacopœial Convention should take the initiative in inviting another international conference for the unification of formulas to meet in the United States in the near future, and that the conclusions reached be incorporated in the U. S. P. X.—Am. J. Pharm. 1919, v. 91, p. 710.

Anon.: A note calls attention to the dispensing of bichloride of mercury by a Belgian pharmacist on an order for *Hydrargyrum chloratum* from a German physician, and points out the need for a "sécretairiat international" of pharmacopœias.—J. pharm. et chim. 1919, v. 20, p. 303.

2. FOREIGN PHARMACOPŒIAS.

1. BELGIAN.

Anon.: King Albert of Belgium has signed a decree nominating for a period of three years the eight members constituting the Belgian pharmacopœial commission.—Chem. & Drug. 1919, v. 91, No. 32, p. 58.

Anon.: The last edition of the Belgian pharmacopœia, which appeared in 1906, is entirely exhausted, and Belgian pharmacists are appealing to those having copies not in use to place them at their disposal.—Chem. & Drug. 1919, v. 91, No. 14, p. 62.

2. BRITISH.

Editorial: The Ph. Brit. V was open to inspection on October 1st and was gazetted on December 31, 1914. This interval is not considered sufficiently long to enable the drug trade to adjust itself to new conditions.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 311.

Anon.: A notice calls attention to the restoration to the British Pharmacopœia of preparations containing sugar, glycerin, and certain oils and fats, which were withdrawn on account of the war.—Pharm. J. Lond. 1919, v. 102, p. 247.

Anon.: A book review calls attention to the tenth edition of a volume by H. Wippell Gadd entitled *A Synopsis of the British Pharmacopœia, 1914, and of the Poison Laws of Great Britian and Ireland.*—Pharm. J. Lond. 1919, v. 102, p. 102.

3. DUTCH.

Anon.: A review of the third supplement to the fourth edition of the Ph. Ndl. states that the supplement contains only some war formulas of a temporary nature which the committee charged with the revision of the pharmacopœia thought necessary on account of the scarcity of fixed oils and fats.—Chem. & Drug. 1919, v. 91, p. 51.

Kolthoff, I. M.: The test of Kerner and Weller for contaminating alkaloids in quinine salts, by titration with ammonia is still retained in the Ph. Ndl. IV. From a comparison of methods, it is concluded that the deVrij tests are the most reliable and should be adopted for the next Dutch pharmacopœia.—Pharm. Weekblad, 1919, v. 56, p. 451–459.

4. FRENCH.

Boutron, A.: Notes on the pharmacopœia of Nantes published in 1677. This work is stated to be the precursor of the present French Codex.—Bull. sc. pharmacol. 1919, v. 26, p. 175–182.

Anon.: A short note showing the manner in which pharmacists are organized for pharmacopœial revision in France.—Pharm. J. Lond. 1919, v. 103, p. 372.

Anon.: The decree of April 6, 1910, nominating members of the permanent codex committee has been rescinded. The membership of the committee as revised by a recent decree is given.—Chem. & Drug. 1919, v. 91, p. 44.

Anon.: A list is given showing the personnel of the 13 subcommittees for the revision of the French pharmacopœia.—J. Am. Pharm. Assoc. 1919, v. 8, p. 1112.

Cabannes, E.: Some general considerations for the coming revision of the Ph. Fr.—Répert. Pharm. 1919, v. 30, p. 257-261.

Carnot, P.: It is recommended that the following be introduced into the supplement of the French pharmacopœia which is to appear soon: Diuretin, veronal, dionine, heroine, stovaine, urotropin, atoxyl, arsenobenzol, etc. A second innovation recommended is that the necessary or sufficient dose be given in place of the maximum dose and that the dose be further fixed according to the mode of administration.—Bull. soc. therap. 1919, v. 3, p. 116, through Bull. sc. pharmacol. 1919, v. 26, p. 446–447.

5. GERMAN.

Richter, R.: A discussion of the Ph. Germ., with special reference to the new items which should be admitted and the items now official which should be deleted.—Pharm. Zentralh. 1919, v. 60, p. 89-92.

Bodinus: Notes on the preparation of tinctures. It is stated that the directions for preparing 24 of the 41 tinctures of the Ph. Germ. should be revised. A general method of preparation, the primary advantage of which is the saving of alcohol, is described.—Apoth.-Ztg. 1919, v. 34, p. 72 and 436. See also O. Anselmo, ibid. See also O. Anselmino, ibid. p. 139–140.

Braun, C.: A number of recommendations are made for changes in the volumetric and test solutions of the Ph. Germ.—Apoth.-Ztg. 1919, v. 34, p. 381–382.

6. GREEK.

Anon.: A note calls attention to the appointment of a committee of 22 members by the Greek minister of the interior for the purpose of preparing the second revised edition of the Greek pharmacopœia. The first edition of the Greek pharmacopœia appeared in 1837 and the second edition of the same in 1869.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 514–516.

7. ITALIAN.

Peiro, E.: A discussion of the ointment bases and ointments of the Ph. Ital. III.—Boll. chim.-farm. 1919, v. 58, p. 337–340.

8. NORWEGIAN.

Jermstad: A book review calls attention to the appearance of a commentary on the Ph. Norv. IV. The first part, which is all that has been published to date, deals only with the vegetable drugs and galenicals. Part two will contain comments on chemical preparations. The work has been compiled by Frode Lieungh and G. Rustung.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 93–94.

9. POLISH.

Anon.: A special commission has been appointed by the Polish Ministry of Health to elaborate a pharmacopœia, including formulas for use in dispensing for members of sick clubs and similar organizations.—Chem. & Drug. 1919, v. 91, No. 44, p. 53.

10. SWEDISH.

Nordstrom, Paul G.: Some observations and reflections on the use of the Ph. Svec. IX based on years of experience. There are 27 subtitles of pharmaceutical preparations and processes.—Svensk farm. Tidskr. 1919, v. 23, p. 481–492, 497–500.

11. SWISS.

Alther, R.: Some new ideas are presented for consideration in the revision of the Swiss pharmacopœia.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 146–148, 157–160.

III. COMMENTS ON OFFICIAL ARTICLES.

ACACIA.

Anon.: Historical notes on the collection and use of gum acacia.—Internat. Confectioner, through Spatula, 1919, v. 26, No. 1, p. 26–27.

Bornträger: A method for the purification of acacia consists in precipitating an aqueous solution with alcohol acidulated with hydrochloric acid.—Boll. chim.-farm. 1919, v. 58, p. 48.

Henrico, Peiro: Notes on the different commercial varieties of gum arabic and on the use of the latter in making various pharmaceutical preparations.—Boll. chim.-farm. 1919, v. 58, p. 433–435.

Kruse, T. K.: From a study of the pharmacology of acacia, it is concluded that there is no evidence to justify its use in man. In solution, one-third isotonic with blood, it causes hemolysis and agglutination and the rhythmicity of smooth and cardiac muscle is diminished by 0.1 per cent solution.—Am. J. Physiol. 1919, v. 49, p. 137.

ACETANILIDUM.

Anon.: In a discussion of the proper dose of acetanilid, it is stated that the Ph. Brit. published in 1890 gave the dose as 3 to 10 grains.

In the Ph. Brit. of 1898, the dose was altered to 1 to 3 grains and in the present Pharmacopœia (1914), it is given as 2 to 5 grains.—Chem. & Drug. 1919, v. 91, No. 2, p. 56.

ACETPHENETIDINUM.

Konantz, William A.: The manufacture of acetphenetidin. Descriptions of the various steps in the process of manufacture are given, together with a historical account of their development.—J. Am. Pharm. Assoc. 1919, v. 8, p. 284–290, 362–385.

Powell, A. D.: A review of the literature on the estimation of phenacetin and a description of a method for the estimation of phenacetin and other para-aminophenol derivatives by the use of hypochlorous acid.—Analyst (The), London, 1919, v. 44, p. 22–25; Am. J. Pharm. 1919, v. 91, p. 241–245.

ACETONUM.

Nathan, Frederick: An account of the large-scale development of the Weizmann process for producing acetone by bacterial fermentation of corn, rice, horse chestnut, etc.—J. Soc. Chem. Ind. 1919, v. 38, p. 271. See also Amos Gill, ibid. p. 273.

Matheson, H. W.: An account of the synthetic production of acetone from calcium carbide as carried out by the Canadian Electro Products Co.—Canadian Chem. J. 1919, v. 3, p. 258–261.

Drewsen, V.: Descriptions are given of patented processes for the manufacture of acetone from waste sulphite liquor and waste soda pulp liquor.—Chem. Abstr. 1919, v. 13, p. 1764–1765.

Jones, Wm. J.: The examination of the products (acetone oils) obtained in the rectification of acetone is described.—J. Soc. Chem. Ind. 1919, v. 38, p. 108–110T.

van Duin, C. F., et al.: A contribution to the analysis of smokeless powder. Methods for the determination of acetone, nitroglycerin, etc., are described.—Rec. trav. chim. 1919, v. 38, p. 163–169.

Marriott, W.: A description of an iodometric method for the quantitative determination of acetone.—J. pharm. et chim. 1919, v. 19, p. 133–136.

Roberts, J. G.: One lot of acetone examined was of U. S. P. quality except that it was 2.25 per cent low in strength.—J. Am. Pharm. Assoc. 1919, v. 8, p. 669.

ACETUM AROMATICUM, N. F.

Diner, Jacob: Aromatic vinegar is a nonessential preparation. It is a useless toilet preparation, hardly known to and rarely employed by either the public, the pharmacist, or the physician.—J. Am. Pharm. Assoc. 1919, v. 8, p. 95.

ACIDUM ACETICUM.

Thomlinson, J. C.: A report of researches on the constitution of acetic acid. Evidence is presented to show the existence of a double structure at certain temperatures.—Chem. News, 1919, v. 118, p. 23–24.

Anon.: German patent No. 305997 describes the preparation of acetic acid from acetylene.—Bayr. Ind.- u. Gew.- Blatt, 1919, v. 105, p. 7, through Pharm. Zentralh. 1919, v. 60, p. 549.

Bada, José: Notes on the progress made in the manufacture and preparation of acetic acid.—Farm. Españ. 1919, v. 51, p. 119–121, 136–137.

Utheim, S.: Norwegian patent No. 29011. A method for the preparation of acetic acid from acetaldehyde is described. The acid is prepared by treating the acetaldehyde with an oxidizing gas under pressure.—Chem. Abstr. 1919, v. 13, p. 731.

Anon.: A discussion of tests for the purity of acetic acid, including a table of results obtained in the analysis of some samples.—Evans' An. Notes, 1919, p. 5–8.

Bayer: A description of a simple method for the detection of formic acid in acetic acid. The method is based on the fact that the brown color of bromine is destroyed by formic acid, HBr and CO_2 being formed.—Pharm. Post, 1918, v. 51, p. 393, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 35.

Polinski, M.: A method for the detection of formic acid in acetic acid is based on the fact that formic acid is easily oxidized by boiling with sulphuric-chromic acid while acetic acid is not attacked.—Chem. Analyst, 1919, No. 29, p. 4.

Anon.: A method is described for the detection of aldehyde in acetic acid prepared from acetylene or calcium carbide.—Bayr. Ind.- u. Gew.- Blatt, 1919, v. 105, p. 7, through Pharm. Zentralh. 1919, v. 60, p. 492.

ACIDUM ACETICUM DILUTUM.

Bachman, Gustave: Of 5 samples of dilute acetic acid examined, 2 were not up to the standard quality, one assaying 4.43 per cent, while the other was somewhat above the pharmacopœial strength, assaying 6.8 per cent.—Proc. Minnesota Pharm. Assoc. 1919, p. 134.

ACIDUM ACETYLSALICYLICUM (NONOFFICIAL).

Roberts, J. G.: Most of the samples of salicylic acid examined had a yellowish appearance and when used for the manufacture of sodium salicylate gave a product with a decided pink color.—J. Am. Pharm. Assoc. 1919, v. 8, p. 669.

Jones, A. J.: A presentation of analytical data showing the purity of commercial samples of aspirin and aspirin tablets. The methods of testing are discussed and standards are suggested.—Chem. & Drug. 1919, v. 91, No. 17, p. 60–62.

Anon.: A discussion of tests for the purity of salicylic acid. It is stated that the best samples melt at 135° to 136° C., and that the Ph. Brit. test for free salicylic acid is unsatisfactory.—Evans' An. Notes, 1919, p. 10–13.

Anon.: In discussing the difficulty of determining the melting point of salicylic acid, the author describes a modification of the U. S. P. method which he states has been used in different laboratories with good results.—Am. Druggist, 1919, v. 67, No. 2, p. 41.

Andrews, L. T., and Herron, Charles S.: A simple method for the assay of acetylsalicylic acid is described. Some observations regarding its melting-point are also made.—Am. Druggist, 1919, v. 67, No. 3, p. 25.

Dahm, Henry L.: Some notes on acetylsalicylic acid, including a description of a modified U. S. P. method for determining the approximate amounts of free salicylic acid present.—J. Ind. & Eng. Chem. 1919, v. 11, p. 29–30.

Leech, Paul N.: Notes on the determination of the melting point of acetylsalicylic acid, with special reference to the method of Dahm and the observations of Andrews and Herron. A standard of 130° to 133° C. is recommended.—Rep. Chem. Lab. Am. M. Assoc. 1919, v. 12, p. 62–63.

Linton, Arthur W.: Attention is directed to the incompatibility of aspirin with urotropin and solution of ammonium acetate, respectively.—Pacific Drug Rev. 1919, v. 31, p. 30.

Anon.: A discussion of R. C. White's article on the manufacture of aspirin tablets.—Chem. & Drug. 1919, v. 91, No. 3, p. 47.

Richard, F.: Analytical data obtained in the examination of 12 commercial samples of aspirin tablets are presented.—J. pharm. et chim. 1919, v. 19, p. 5–17.

Barbour, Henry G., and Devenis, Michael M.: Antipyretics. II. Studies on the effect of acetylsalicylic acid on the heat regulation in normal individuals. III. Acetylsalicylic acid and heat regulation in fever cases.—Arch. Int. Med. 1919, v. 24, p. 617–632.

Yamamoto, K.: A study of the antipyretic properties of aspirin and other salicylic acid derivatives. Aspirin is found to be a more efficient antipyretic than salicylic acid or novaspirin.—Japanese Med. Lit. 1919, v. 4, p. 21.

Table showing some of the analytical results reported for acetylsalicylic acid.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Holt, Thomas......	4	1	Rep. Connecticut D. & F. Com. 1919, p. 21.
Bailey, E. M........	23	1	Bull. Connecticut Agric. Exper. Sta. 1919, No. 219, p. 247–248.
Wiedemann, H. F..	8	3	Rep. Missouri F. & D. Com. 1919, p. 16, 25, and 27.
Scofield, Walter W.	18	8	Rep. New Jersey Dept. Health, 1919, p. 85.
Roberts, J. G.......	41	5	Proc. Pennsylvania Pharm. Assoc. 1919, p. 82.

ACIDUM BENZOICUM.

Kaufmann, H. P.: A report of investigations on the bactericidal action of benzoic acid on bouillon cultures of staphylococcus and the bacillus of diphtheria.—Ztschr. angew. Chem. 1919, v. 32, p. 199–200.

Robert, J. G.: All of the samples of benzoic acid examined were of U. S. P. quality except that one had a decided yellow color.—J. Am. Pharm. Assoc. 1919, v. 8, p. 669.

Ewe, G.: Of 8 lots of benzoic acid examined, one contained 0.25 per cent chloride, calculated as chlorine, which is greatly in excess of the U. S. P. allowance.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 83.

ACIDUM BORICUM.

Jannash, Paul, and Noll, Friedrich: A method for the determination of boric acid is based on the fact that B_2O_3 in the form of the methyl ester is completely volatilized at 60° to 90° when heated for 30 minutes in a current of methyl alcohol vapor.—J. prakt. Chem. 1919, v. 99, p. 1–33.

Prescher, Johannes: It is demonstrated that phenolphthalein is the best indicator for the titration of boric acid.—Ztschr. Unters. Nahr.-u. Genussm. 1918, v. 36, p. 283–286, through Chem. Zentralbl. 1919, v. 2, p. 890.

Funk, E.: A sample of powdered boric acid examined gave a strong test for nitric acid. It is pointed out that the Ph. Germ. does not prescribe a test for nitric acid in this connection.—Zentralbl. f. Pharm. 1919, v. 15, p. 91, through Pharm. Zentralh. 1919, v. 60, p. 565.

Tanner, Fred W., and Funk, Ruth S.: Some experimental observations on the use of boric acid as a disinfectant.—Am. J. Pharm. 1919, v. 91, p. 206–210.

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Hanke, Milton T., and Koessler, Karl K.: A study of the electronic constitutions of citric acid and acetoacetic acids and some of their derivatives.—J. Am. Chem. Soc. 1918, v. 40, p. 1726–1732.

Broeksmit, T. C. N.: A method for the determination of free and combined citric acid in mixtures is described in detail. The determination is made by means of the iodoform reaction with the assistance of the permanganate method.—Pharm. Weekblad, 1919, v. 56, p. 1047–1052.

Thompson, Firman: A report of a preliminary investigation on the separation and determination of citric, malic, and tartaric acids in fruit juices.—Bull. Delaware Agric. Exper. Sta. 1918, No. 119, p. 18–19.

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Leech, Paul N., et al.: A report on the examination of barbital, procaine, etc., manufactured under licenses from the Federal Trade Commission.—J. Am. M. Assoc. 1919, v. 73, p. 754–759.

van Itallie, L., and van der Veen, A. L. W. E.: Reactions for the detection of veronal, luminal, and proponal are described. Diagrams and descriptions of the various crystalline forms are given.—Pharm. Weekblad, 1919, v. 56, p. 1112–1117.

Richards, P. A. E.: Notes are given on the identification of cocaine, heroine, and veronal in viscera.—Analyst, (The), London, 1919, v. 44, p. 192–196.

Roemer, C.: In 10 cases of poisoning with large doses of veronal, spontaneous rhythmic changes in the width of the pupils of the eye were observed.—Deutsch. med. Wchnschr. 1919, v. 45, p. 1305–1306.

Gautier, P.: Four cases of attempted suicide by taking 3.5, 5, 7, and 8 grams, respectively, of veronal are reported. Two other fatal cases are also reported, the fatal doses being 3 and 5 grams, respectively.—Rev. med. Suisse rom. 1918, v. 38, p. 641, through J. Am. M. Assoc. 1919, v. 72, p. 230.

Casparis, P.: An account of the chemical examination of an abnormal sample of sodium diethylbarbiturate.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 255.

Warren, L. E.: A report on the examination of commercial samples of barbital-sodium.—Rep. Chem. Lab. Am. M. Assoc. 1919, v. 12, p. 70–77.

ACIDUM FORMICUM, N. F.

Jones, D. C.: A note on the dehydration of formic acid solutions. It has been found that phosphoric anhydride can be used to produce a high yield of very concentrated formic acid.—J. Soc. Chem. Ind. 1919, v. 38, p. 362T–363T.

Mahood, S. A., and Cable, D. E.: Formic acid is found to be one of the reaction products of alkali-sawdust fusion. Under certain conditions a yield of 15 per cent can be obtained.—J. Ind. & Eng. Chem. 1919, v. 11, p. 651–655.

Hofmann, K. A., and Schibsted, Helge: A report of studies on the reducibility of formic acid. Attempts to reduce the acid to formaldehyde and methyl alcohol with hydrogen under the most varied conditions never resulted in a greater yield than 4 per cent.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 1389–1398.

Comanducci, E.: A test for formic acid is based on the fact that a green or blue coloration results when a solution of formic acid is treated with a concentrated solution of sodium bisulphate followed by the addition of a freshly prepared dilute solution of sodium nitroprusside.—Boll. chim. farm. 1918, v. 57, p. 101–102.

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ACIDUM HYDROCHLORICUM.

Schultz, A. R.: An illustrated account of the manufacture of hydrochloric acid by modern methods.—Chem. Abstr. 1919, v. 13, p. 500.

Schmidt, H.: A method for roughly determining the concentration of hydrochloric acid is based on the difference in the capillary rise of the acid and water in strips of blotting paper.—Kolloid-Ztschr. 1919, v. 24, p. 49–56.

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Bachman, Gustave: Ten samples of concentrated hydrochloric acid examined were from 3 to 5 per cent stronger than the U. S. P. HCl. They assayed 35.1, 35.8, 36.3, 36.5, 36.8, 37.6, 37.6, 38.2, and 38.5 per cent, respectively.—Proc. Minnesota Pharm. Assoc. 1919, p. 134.

Villiers: The determination of ammonia and hydrochloric acid by weighing as ammonium chloride is described.—Ann. chim. anal. chim. appl. 1919, v. 1, p. 51–52.

ACIDUM HYDROCHLORICUM DILUTUM.

Bachman, Gustave: All of 8 samples of dilute hydrochloric acid examined were above the official strength, which is 9.5 to 10.5 per cent. They ranged from 11 to 13.2 per cent.—Proc. Minnesota Pharm. Assoc. 1919, p. 134.

ACIDUM HYDROCYANICUM DILUTUM.

Chelle, L.: A review of the known tests for the detection of hydrocyanic acid, with a procedure for determining the maximum sensitiveness of the phthalein test, the isopurpuric test, the ammoniacal silver iodide test and the Prussian blue test.—Bull. soc. pharm. Bordeaux, 1919, p. 70, through J. Pharm. et chim. 1919, v. 19, p. 361.

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Shuppli, O.: A study of the methods of Szeberenyi and Möslinger for the determination of lactic acid by oxidation.—Mitt. Lebensm. Hyg. 1919, v. 10, p. 44–47.

Suto, K.: Eleven lots of lactic acid examined assayed between 75 and 84 per cent lactic acid, but were otherwise U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 87; J. Am. Pharm. Assoc. 1919, v. 8, p. 673.

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Kippenberger, C.: A review of the technical methods in use at the present time for the manufacture of potassium nitrate and nitric acid.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 391–405.

Pascal, P., and Garnier: The densities of nitrosulphuric acid mixtures are given in tabular form and are also plotted on a triangular graph.—Bull. soc. chim. France, 1919, v. 25, p. 142–145.

Maugé, L.: A rapid method for the determination of nitric acid for use in controlling commercial processes. The method is based on the reaction between HNO_3 and $FeSO_4$.—L'Industrie chimique, 1918, v. 5, p. 255–256, through Chem. Abstr. 1919, v. 13, p. 545.

Bachman, Gustave: Two samples of dilute nitric acid analyzed contained 13.1 and 16.58 per cent of nitric acid, respectively.—Proc. Minnesota Pharm. Assoc. 1919, p. 134.

ACIDUM PHENYLCINCHONINICUM.

Davy, E. D.: The intermediates used in the preparation of phenylcinchoninic acid are benzylidine, aniline and pyroracemic acid. Details for their manufacture on a small scale are given, also the method of combining them to produce phenylcinchoninic acid.—J. Am. Pharm. Assoc. 1919, v. 8, p. 281–283.

Anon.: Results obtained in the analysis of American-made phenylcinchoninic acid are reported.—Rep. Chem. Lab. Am. M. Assoc. 1918, v. 11, p. 73–81.

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Joannis, A.: A further proof that the three acid functions of phosphoric acid are not of the same value. After one has been neutralized, it is impossible to neutralize the other two by gaseous or liquid ammonia in the absence of water.—Compt. rend. acad. sc. 1919, v. 168, p. 1202–1203; J. Soc. Chem. Ind. 1919, v. 38, p. 533A–534A.

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Wightman, E. P., and Robinson, George: A description of the manufacture of synthetic salicylic acid.—Chem. Age, 1919, v. 1, p. 79–84.

Orthner, R.: The dissociation of salicylic acid, as measured by the Gay-Lussac method, is found to decrease continuously with the increase in pressure from 98 per cent at 100 mm. to 82 per cent at 1,200 mm.—Ztschr. physik. Chem. 1918, v. 93, p. 220–235.

Berg, R.: A method for the volumetric determination of salicylic acid in the presence of salicylic aldehyde is based on the fact that solutions of salicylic aldehyde are colored an intense yellow by a trace of alkali and are decolorized by acids, even CO_2.—Chem. Ztg. 1919, v. 43, p. 129; Ann. chim. anal. chim. appl. 1919, v. 1, p. 220.

Kluchansky, E. W.: U. S. patent No. 1,304,572. A description of an apparatus for the sublimation of salicylic acid or similar substances.—Chem. Abstr. 1919, v. 13, p. 1961.

Roberts, J. G.: While all the samples of salicylic acid examined gave satisfactory results with the U. S. P. tests, it appears difficult to obtain an entirely satisfactory product, as most of the samples had a yellowish appearance, and when used for the manufacture of sodium salicylate gave a product with a decided pink color.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 82.

Yamamoto, K.: A comparison of the antipyretic action of salicylic acid and its derivatives.—Kyoto J. Med. Science, 1918, v. 15, No. 2, March, through Japanese Med. Lit. 1919, v. 4, p. 21.

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Hill, Rutherford: Crystals deposited from a sample of sulphuric acid were found to consist of ammonium sulphate.—Chem. & Drug. 1919, v. 91, No. 16, p. 65; Pharm. J. Lond. 1919, v. 102, p. 237.

Meillère, G.: Notes on the gravimetric determination of sulphuric acid with barium chloride and on the volumetric determination with barium hydroxide.—J. pharm. et chim. 1919, v. 19, p. 296–297.

Wareing, A. E., and United Alkali Co.: British patent No. 126,714. Sulphuric acid is freed from arsenic by treating it with H_2S, separating the As_2S_3 by agitating with paraffin oil to form a scum and separating the scum.—Chem. Abstr. 1919, v. 13, p. 2421.

ACIDUM SULPHURICUM DILUTUM.

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Lauffmann, R.: A discussion of new methods of estimating tannin and their practical value as compared with the hide-powder method.—Collegium, 1918, p. 185–190, through Chem. Abstr. 1919, v. 13, p. 524.

Lee, F. T.: A report of experiences with a modification of Jena's iodine method for the titration and estimation of tannin.—J. Soc. Leather Trades' Chem. 1919, v. 3, p. 8–10, through Chem. Abstr. 1919, v. 13, p. 798.

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Berner, E.: The differences in the heat of combustion, specific gravity, solubility, and sublimation point were ascertained for the isomeric forms of tartaric acid.—Tidskr. Kemi, 1919, v. 16, p. 97–110, 118–128.

Abel Scholar: Fenton's test for tartaric acid (Ph. Brit. appendix, p. 496) does not seem to work with such tartrates as Rochelle salt and tartar emetic. In such cases, it is better to prepare the lead tartrate, decompose with H_2S and proceed as for free tartaric acid.—Chem. & Drug. 1919, v. 91, No. 33, p. 71.

Pritzker, J.: The baking powder problem. Notes on the method of Tillmans and Hueblin for the detection of tartaric acid, with a description of a method for its quantitative determination.—Schweiz. Apoth.-Ztg. 1919, v. 363–366 and 380–385.

Bau, A.: A method for the separation of oxalic acid from tartaric acid is based on the fact that the presence of boric acid retards most of the reactions of tartaric acid.—Chem. Ztg. 1918, v. 42, p. 425, through Pharm. Zentralh. 1919, v. 60, p. 402.

Borntraeger, Arturo: Notes on the reaction between neutral potassium sulphate and tartaric acid under various conditions.—Ann. chim. applicata, 1919, v. 12, p. 1–23.

ACONITINA.

Palet, L. P. J.: A new reaction for aconitine. On heating crystallized aconitine with a mixture of 25 grams of concentrated phosphoric acid and 1 gram of sodium molybdate directly over a flame until vapors appear, a brilliant violet color is produced.—J. pharm. et chim. 1919, v. 19, p. 295-296.

ACONITUM.

Alsberg, Carl L., et al.: Japanese aconite (*Aconitum fischeri* Reich) and *Aconitum chasmanthum* Stapf., an Indian species, have recently been substituted for *Aconitum napellus*. Data showing the ether-soluble alkaloids in both mother and daughter tubers of the Japanese species are given.—J. Am. Pharm. Assoc. 1919, v. 8, p. 465-466.

Anon.: It is reported by the Bureau of Chemistry that in one shipment of imported "aconite" the root of *Aconitum chasmanthum* Stapf. was substituted for the true material. A comparative description of the two species is given.—S. R. A. Chem. 1918, No. 23, p. 99-100.

Holmes, E. M.: It is stated that the use of aconite for internal medication is rapidly falling off in Great Britain owing to the substitution of *Aconitum paniculatum* for the official *Aconitum napellus*. In order to overcome this condition, it is suggested that the next British pharmacopœia direct that the tincture of aconite be prepared from the fresh plant, collected in May and grown in Great Britain.—Pharm. J. Lond. 1919, v. 102, p. 34.

White, Wm. R.: The use of purified sawdust in the aconite assay is stated to be unsatisfactory because it is hard to obtain, difficult to purify, and does not give uniform results.—Proc. Tennessee Pharm. Assoc. 1919, v. 37.

Oddo, Bernardo: A report of experiments on the assay of aconite extract and fluidextract.—Ann. chim. applicata, 1919, v. 12, p. 88-98.

Roberts, J. G.: One lot of aconite root examined was rejected because it contained only 0.44 per cent of ether-soluble alkaloids and about 45 per cent of decayed and soft spongy material.—J. Am. Pharm. Assoc. 1919, v. VIII, No. 8, p. 669.

Éwe, G.: Of five samples of aconite root examined, one was below standard.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

Strauss, Spencer G.: A report of the successful use of aconite in the treatment of epidemic influenza.—Med. Rec. 1919, v. 96, p. 798-800.

ADEPS.

Hommell, P. E.: The U. S. P. should state, for the sake of preservation, the particular container for lard and also specify a refrigerator as the proper place for storage.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

Salkowski, E.: From experiments, it is concluded that the rancidity of lard and butter-fat is not due to the action of bacteria nor to ferments, but to the combined activity of atmospheric oxygen and light.—Ztschr. Unters. Nahr.- u. Genussm. 1919, v. 34, p. 305.

ADEPS LANÆ.

Liebreich, Erik: A short contribution to the history of lanolin.—Pharm. Ztg. 1919, v. 64, p. 435.

Anon.: A short article giving general descriptions of methods for the manufacture of lanolin.—Pharm. J. Lond. 1919, v. 102, p. 54.

Anon.: A description of a new method for obtaining wool fat.—Chem. Umschau, 1919, v. 26, p. 165.

Marsek, F. A.: Data obtained in the determination of the chemical constants of wool fat from various sources are presented. The use of lanolin in the preparation of cosmetics is discussed.—Am. Perf. 1919, v. 14, p. 195–196.

Grimwade, W. Russell: A discussion of two important developments in the wool scouring industry of Australia.—Science and Ind. Australia, 1919, v. 1, p. 86, through Chem. Abstr. 1919, v. 13, p. 2461.

Éwe, G.: Anhydrous lanolin has been a cause of some concern during the past year, the odor, amount of ash and reaction of ash in particular having tended to deviate from the U. S. P. requirements. A detailed report of 13 lots examined, many of which were rejected, is given.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 87.

For patents covering the decolorizing and bleaching of lanolin, see Chem. Abstr. 1919, v. 13, p. 1944.

ÆTHER.

Mailhe, A., and de Gordon, F.: An account of the preparation of ether by the dry method, using an aluminum catalyst.—Bull. soc. chim. France, 1919, v. 25, p. 565.

Flaherty, E. M.: U. S. patent No. 1,312,475. Ether is purified by washing with cold water, treating it with cold 10 per cent sodium hydroxide solution and passing the vapor over solid sodium hydroxide.—Chem. Abstr. 1919, v. 13, p. 2575.

Paul, T., and Schamtz, K.: An investigation of the effects of the presence of water and alcohol, respectively, on the boiling point of ether.—Arch. Pharm. 1919, v. 257, p. 87–129.

Aliliare, E.: A note on the spontaneous ignition of mixtures of ether vapors and air.—Compt. rend. acad. sci. 1919, v. 168, p. 729.

Jones, A. J.: Analytical data showing the variation in the purity of commercial samples of ether are presented. Methods for the detection of methyl alcohol and acetone are described and commented on. A limit of 0.05 per cent of methyl alcohol in ether should be permitted.—Pharm. J. Lond. 1919, v. 103, p. 71–73; Year-Book Pharm. & Trans. 1919, p. 403–412.

Anon.: A discussion of methods for determining the purity of ether, with special reference to the detection of acetone and methyl alcohol.—Evans' An. Notes, 1919, p. 50–52.

Maue: The following is given as a test for aldehydes in ether intended for narcosis: Dissolve 0.02 gram of guaiacol carbonate in 1 cubic centimeter of ether, add 1 cubic centimeter of water and 1 drop of ferric chloride solution and carefully float the liquid on 2 cubic centimeters of sulphuric acid. A red ring should not form at the zone of contact during 10 minutes.—Pharm. Ztg. 1918, p. 255, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 34.

Weehuizen, F.: Attention is directed to the presence of an impurity in some samples of ether which gives a blue coloration on the addition of benzidine. The impurity may be removed by keeping the ether in contact with potassium hydroxide.—Pharm. Weekblad, 1919, v. 56, p. 301–303.

Francis: Report of subcommittee on chloroform. A discussion of the decomposition of ether and the efficiency of different qualities of ether.—Proc. Am. Drug Mfg. Assoc. 1919, p. 250–252.

Ford, Charles M.: A historical note dealing with the discovery of the anesthetic properties of ether and the ether monument erected in Boston.—J. Am. Pharm. Assoc. 1919, v. 8, p. 1034–1041.

Gwathmey, J. T., and Bliss, S. W.: A mixture of ether 85 parts and olive oil 15 parts when injected subcutaneously produces anesthesia in the guinea pig. For 100 grams body weight a maximum dose of 0.87 is sufficient for producing long anesthesia and a minimum dose of 0.46 is sufficient for producing anesthesia of short duration.—New York M. J. 1919, v. 110, p. 96–97.

Remlinger, P.: An investigation of the action of ether on rabies virus.—Ann. inst. Pasteur, 1919, v. 33, p. 616–633.

ÆTHER ACETICUS, N. F.

Farbwerke vorm M. L. & B.: German patent No. 308,043. A process for the preparation of ethyl acetate depends on the use of a solution of $Al(OC_2H_5)_3$, which contains only traces of halogen compounds, in an organic solvent of high boiling point, such as solvent naphtha.—Chem. Abstr. 1919, v. 13, p. 1076.

Szeberényi, P.: Methods for the determination of the ester and free alcohol content of acetic ether are described.—Ztschr. anal. Chem. 1914, v. 53, p. 683, through Pharm. Zentralh. 1919, v. 60, p. 536.

Zimmermann, Walther: A report on the chemical examination of a sample of ethyl acetate.—Apoth.-Ztg. 1919, v. 34, p. 13.

AGAR.

Cunningham, J.: A note on the preparation of a purified agar powder with increased powers of filtration.—Indian J. Med. Research, 1919, v. 16, p. 560, through Abstr. Bact. 1919, v. 3, p. 334.

Liesegang, R. E.: Notes on the liquefaction of gelatin and agar-agar by means of calcium salts.—Farben-Ztg. 1919, v. 24, p. 971–972, through Chem. Abstr. 1920, v. 14, p. 486.

ALCOHOL.

Meppi, B.: A discussion of the possible use of the following for the production of ethyl alcohol: *Arum masculatum*, *Arum italicum*, *Asphodelus ramosus*, *Cactus opuntia*, horse-chestnut, acorns, and seaweeds. A bibliography is appended.—Giorn. chim. ind. 1919, v. 1, p. 76–79, through Chem. Abstr. 1920, v. 14, p. 998.

Thompson, Erwin W.: A note on the production of alcohol from lava and peat in Sweden. One hundred kilos of dried peat substance are stated to yield about 6 liters of 100 per cent alcohol.—Com. Rep. 1919, No. 6, p. 107.

Kayser, E.: *Laminaria flexicaulis* and *L. saccharina* when dried, cut into small pieces and heated with water under pressure, give a liquid which can be fermented. The yield of alcohol is from 3.58 to 3.76 liters per 100 kilograms of the dry algae.—Ann. chim. analyt. 1919, v. 24, p. 79–80; J. Soc. Chem. Ind. 1919, v. 38, p. 266A.

Ellrodt and Kunz: A report of the production of alcohol by the fermentation of sugar obtained from reindeer moss.—Brennerei-Ztg. 1918, p. 6171; Chem. Ztg. 1919, v. 43, Rep. 40; J. Soc. Chem. Ind. 1919, v. 38, p. 333A.

Anon.: A syndicate has petitioned the Swedish Government for permission to manufacture alcohol from white moss. The quality of such alcohol is said to be very good and the cost of manufacture less than when made from grain or potatoes.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 7.

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Anon.: A description of a method for decolorizing alcohol which has been colored by the action of tannic acid and iron.—Der Drogenhandler, 1919, No. 45, p. 446, through Pharm. Zentralh. 1919, v. 60, p. 537.

Anon.: A discussion of formulas for the calculation of the "proof" of alcohol.—Chem. & Drug. 1919, v. 91, No. 17, p. 67–68.

Bird, F. C. J.: Tables for the conversion of proof spirit are given, with explanatory notes.—Chem. & Drug. Lond. 1919, v. 91, No. 52, p. 75–78.

Liverseege, J. F.: Formulas previously reported for converting statements of alcoholic strength are recalculated on the basis of Thorpe's tables.—Analyst (The), London, 1919, v. 44, p. 167.

Rogers, Charles H.: A comparison of methods for the determination of alcohol in fermented liquors.—J. Am. Pharm. Assoc. 1919, v. 8, p. 547–550.

Faust, O.: The amount of alcohol in a mixture of alcohol and water may be determined from the refractive index of the mixture if not more than 40 per cent of alcohol is present.—Ztschr. anal. Chem. 1919, v. 58, p. 145–148; J. Soc. Chem. Ind. 1919, v. 38, p. 551 A.

Cox, H. E.: A description of a method for the determination of small quantities of ethyl ether in ethyl alcohol based on the fact that alcohol of 98 per cent and upward distills over unchanged under ordinary conditions; any ether present passes over in the first fractions, and no constant boiling mixture is formed. Therefore the amount of ether may be determined by taking the specific gravity before and after distillation.—Analyst, (The), London, 1919, v. 44, p. 26–27.

Babington, F. W., and Tingle, Alfred: A comparison of the Holde-Winterfeld-Wolff and Canadian inland revenue methods for the detection of small amounts of benzene in ethyl alcohol.—J. Ind. & Eng. Chem. 1919, v. 11, p. 355–356.

Christiansen, Johanne: Theory and practice of disinfection by alcohol. The disinfecting power of alcohol is stated to depend not only on its power to precipitate the proteins of bacteria, but on its capacity to penetrate the cell walls, and thus exert its effect on the protoplasm of the organism.—Ztschr. physiol. Chem. 1918, v. 102 p. 275–305.

Wild, R. B.: A discussion of the pharmacology of alcohol.—Lancet, 1918, v. 2, p. 623–625.

Hays, Melville A.: The opinions of several physicians on the therapeutic uses for alcohol are presented.—New York M. J. 1919, v. 110 p. 22–24, 67–69.

Atwater, W. O.: An investigation of the protein-sparing action of alcohol. The classification of alcohol as a protein poison can be permitted only as the expression of a plausible theory and is not justified by established facts.—Bull. soc. sci. d'hyg. alimentaire, 1919, v. 7 p. 371–403, through Chem. Abstr. 1920, v. 14, p. 574.

ALCOHOL, DENATURED (NONOFFICIAL).

Anon.: A list of new formulas for denaturing alcohol authorized by the Commissioner of Internal Revenue.—Drug. & Chem. Markets 1919, v. 5, No. 46, p. 15.

Roper, Daniel C.: Formula No. 30 of the Bureau of Internal Revenue for the preparation of special denatured alcohol for use in chemical and physical laboratories.—J. Ind. & Eng. Chem. 1919, v. 11, p. 379.

Rae, W. N., and Symons, C. T.: British patent No. 129904. A denaturant for alcohol consists of an essential oil such as citronella, with or without the addition of kerosene or paraffin oil, or mineral naphtha.—Chem. Abstr. 1919, v. 13, p. 2883.

Nitardy, F. W.: Attention is directed to the advisability of adding croton oil or tartar emetic to alcohol to render it unfit for use as a beverage.—J. Am. Pharm. Assoc. 1919, v. 8, p. 957.

Davis, Clarke E., and Harvey, Mortimer T.: Results obtained in the determination of the freezing-point, curves, and densities of denatured alcohol-water mixtures are presented in the form of tables and curves.—J. Ind. & Eng. Chem. 1919, v. 11, p. 443–448.

R. P.: Brandies with a peculiar pyridine odor have been found to contain denatured alcohol. Methods for detecting pyridine and methyl alcohol are described.—Pharm. Ztg. 1919, v. 64, p. 278–279.

Anon.: Twenty-seven samples of denatured alcohol were found to contain wood alcohol and were not properly labeled.—Bull. Massachusetts Bd. Health, 1919, v. 6, p. 178, 228.

ALCOHOL DEHYDRATUM.

Anon.: A discussion of Denigès' test for the detection of methylated products in absolute alcohol.—Evans' An. Notes, 1919, p. 13–15.

ALCOHOL DILUTUM.

Wood, Horatio C., jr.: Data showing the shrinkage of alcohol-water mixtures are presented in the form of tables and graphs.—J. Am. Pharm. Assoc. 1919, v. 8, p. 730–734.

ALCOHOL, METHYL (NONOFFICIAL).

Editorial: The problem of wood alcohol poisoning is discussed.—J. Am. M. Assoc. 1919, v. 72, p. 348.

Loewy, A. and von der Heide, R.: Experimental data relative to the poisonous action of methyl and ethyl alcohol, when the vapours of either are inhaled, are presented.—Berl. klin. Wchnschr. 1918, v. 55, p. 67, through Pharm. Zentralh. 1919, v 60, p. 405.

Gettler, A. O., and St. George, A. V.: Clinical tests are described to show the poisonous effect of wood alcohol. A plea is made for legislation to prohibit the sale of wood alcohol for domestic purposes.—J. Am. M. Assoc. 1919, v. 70, p. 145–146.

Anon.: A report of blindness in the case of a number of soldiers of Saksen who drank Spiritus Formicarum. An investigation showed that the spirit contained methyl alcohol.—Pharm. Weekblad. 1919, v. 56, p. 117.

Betts, N. S.: A report of four cases of wood alcohol poisoning as a result of drinking bay rum.—U. S. Naval Med. Bull. 1919, v. 13, p. 791–795.

Anon.: The drinking of methylated spirit by women has greatly increased in Liverpool, according to the licensing justices, who recommend drastic measures to combat this evil.—Chem. & Drug. 1919, v. 91, No. 3, p. 35.

Anon.: A report of a case of methyl alcohol poisoning in Kensington, England, due to the drinking of methylated spirit.—Chem. & Drug. 1919, v. 91, No. 10, p. 49.

Sabalitschaka, T.: To distinguish between absolute methyl and ethyl alcohol, shake 2 cubic centimeters of the sample for a period of 10 minutes with 0.1 gram of powdered crystalline copper sulphate and filter. Add 5 cubic centimeters of water and 3 cubic centimeters of 10 per cent ammonia solution. With methyl alcohol a deep blue color appears, while with ethyl alcohol the solution becomes only faintly blue.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 214–219.

Lillig, Richard: A comprehensive compilation of the reactions and methods for the detection of methyl alcohol and formaldehyde which have appeared in the literature.—Pharm. Ztg. 1919, v. 64, p. 415–416, 423–424, 431–432.

Zimmermann, W.: A discussion of methods for the detection of methyl alcohol in ethyl alcohol, which depend on the oxidation of methyl alcohol to formic aldehyde and the detection of the aldehyde by means of the magenta-sulphur dioxide reagent. Methyl alcohol may also be detected by dissolving 0.5 gram of sodium salicylate in 1 gram of the sample to be tested and adding 5 drops of concentrated sulphuric acid during one minute. Distinct odor of methyl salicylate is noticed if methyl alcohol is present.—Pharm. Zentralh. 1919, v. 60, p. 175–177; J. Soc. Chem. Ind. 1919, v. 38, p. 594A.

Salkowski, E.: The tests for methyl alcohol which depend on the formation and identification of formaldehyde are reliable when dealing with methyl and ethyl alcohols alone. Higher alcohols yield distinct traces of formaldehyde. One of these tests is described.—Ztschr. Unters. Nahr.- u. Genussm. 1918, v. 36, p. 262–270, through J. Soc. Chem. Ind. 1919, v. 38, p. 382A–383A.

Wolff, Hans: Most color tests for the detection of methyl alcohol, including that with morphine hydrochloride, are unreliable, as similar results are obtained with the higher alcohols. The test with sulphuric acid containing apomorphine is reliable because it gives a blue-violet color with formaldehyde, while the oxidation products of the higher alcohols give colors varying from yellow to reddish-brown.—Chem. Ztg. 1919, v. 43, p. 555.

Ehman, Joseph W.: A discussion of the U. S. P. test for methyl alcohol in ethyl alcohol. A modified method for preparing the fuchsin reagent is described.—Am. J. Pharm. 1919, v. 91, p. 594–597.

Polinski, M.: A method for the detection of methyl alcohol in ethyl alcohol is based on the production of a pink coloration by means of a reagent consisting of 8 drops of a 1 per cent solution of phenylhydrazine hydrochloride, 4 drops of a 5 per cent solution of potassium ferrocyanide, and 1 cubic centimeter of concentrated hydrochloric acid.—Chem. Analyst, 1919, v. 28, p. 11.

Pannwitz: The method of Sabalitschke for distinguishing between methyl and ethyl alcohol by means of the greater solubility of copper sulphate or iron sulphate in the former can not be applied to mixtures of methyl and ethyl alcohol with or without the presence of water. The borax flame test of Pieszczek is also unreliable. Recourse must be had to oxidation with potassium permanganate or dichromate.—Pharm. Zentralh. 1919, v. 60, p. 441.

Maue, G.: Sailer's method for detecting methyl alcohol is criticized on account of the difficulty in accurately distinguishing between the odor of orange blossoms produced by methyl alcohol and pineapples produced by ethyl alcohol. A more satisfactory test is proposed by the author.—Ztschr. Unters. Nahr.-u Genussm. 1919, v. 35, p. 179–183.

ALETRIS, N. F.

Anon.: A couple of samples of aletris examined by the Bureau of Chemistry showed that they consisted largely of false unicorn *Chamaelirium luteum*, and contained only about 3 per cent of true unicorn root, *Aletris farinosa*.—S. R. A. Chem. Suppl. 1918, No. 46, p. 339.

ALOE.

Dussel. G. B.: An account of the collection of Curaçao aloe. Curaçao aloe is collected generally on the Island of Aruba, although large areas on Curaçao and Bonaire are also cultivated. The process of collecting and preparing the inspissated juice is described.—Pharm. Weekblad, 1919, v. 56, p. 1512–1514.

Xrayser: A brief historical note on the beginning of European trade in Socotrine aloe.—Chem. & Drug. 1919, v. 91, No. 45, p. 59.

Seel, Eugen: A chemical and pharmacological study of aloe. I. The oxidation of aloe constituents with alkali persulphate. II. Oxidation with Caro's acid. III. Oxidation with hydrated sodium peroxide.—Arch. Pharm. 1919, v. 257, p. 212–259.

Dunham, Carroll: A discussion of the value of aloe from the standpoint of the homeopathic practitioner.—Homeopathic Rec. 1919, v. 34, p. 163–168.

ALOINUM.

Anon.: Samples of aloin from good sources were found to yield from 0.01 to 0.6 per cent of ash.—Evans' An. Notes, 1919, p. 17.

Roberts, J. G.: In one lot of aloin examined there was slightly more residue and water-insoluble matter than is permitted by the U. S. P.—J. Am. Pharm. Assoc. 1919, v. 8, p. 670.

ALTHÆA.

von Friedrichs, Oscar: An examination of althea root revealed the presence of 1.7 per cent of a fixed oil consisting chiefly of the glycerides of palmitic and oleic acids, also butyric acid and a phytosterin; lecithin; 10.2 per cent of sucrose and 0.78 per cent of invert sugar; a gum of the general polysaccharide formula $(C_6H_{10}O_5)_x$.—Arch. Pharm. 1919, v. 257, p. 288–298.

ALUMEN.

Milbauer, J., and Skutil, F.: The manufacture of alum from kaolin rich in iron is described.—Chem. Ztg. 1918, v. 42, p. 525-527, through J. Soc. Chem. Ind. 1918, v. 37, p. 765A.

Vegard, L., et al.: A study of the crystal structure of the alums and the rôle of water of crystallization.—Chem. Abstr. 1919, v. 13, p. 7, 2478.

Roberts, J. G.: One lot of ammonia alum was not of U. S. P. quality, as it contained an excessive amount of iron and heavy metals.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 83; J. Am. Pharm. Assoc. 1919, v. 8, p. 670.

ALUMEN EXSICCATUM.

Hommell, P. E.: The exsiccated form of alum is so seldom prescribed, that it would seem best to delete it from the U. S. P.—Proc. New Jersey Pharm. Assoc. 1919, p. 39.

ALUMINI HYDROXIDUM.

Anon.: Aluminum hydroxide is suggested as a vehicle for pastes to be used as a substitute for ointments. It is stated to absorb both water and oil, is unctuous, stable, does not stain, softens the tissues and promotes absorption of the medicament.—Bull. Pharm. 1919, v. 33, p. 40.

Anon.: One sample of aluminum hydroxide examined was found to be quite insoluble in acids and appeared to consist of anhydrous Al_2O_3 instead of $Al_2(OH)_6$.—Evans' An. Notes, 1919, p. 17.

ALUMINI SULPHAS, N. F.

Anon.: The formula for pure aluminum sulphate is given as $Al_2(SO_4)_3.16H_2O$. Some commercial samples contained from 0.5 to 5.2 per cent of sodium sulphate.—Evans' An. Notes, 1919, p. 17.

Rustung, G.: The samples of aluminum sulphate examined were often impure and partially decomposed.—Norges Apotek. Tidsskr. 1919, p. 41–53, through Apoth.-Ztg. 1919, v. 34, p. 122.

AMMONII CARBONAS.

Anon.: A short review of the changes which have been made in the description and tests of ammonium carbonate in the last three editions of the Ph. Brit.—Evans' An. Notes, 1919, p. 20–21.

AMMONII CHLORIDUM.

Wegscheider, Rud.: It is found that the vapor-pressure curves of ammonium chloride do not follow the course predicted by the Clausius-Clapeyron equation.—Ztschr. anorg. Chem. 1918, v. 103, p. 207–220.

Funk, E.: A sample of ammonium chloride examined was found to contain sulphocyanides.—Zentralbl. f. Pharm. 1919, v. 15, p. 91, through Pharm. Zentralh. 1919, v. 60, p. 565.

AMMONII IODIDUM.

Rupp, E.: Ammonium iodide is prepared by adding 30 parts of ammonia water to 10 parts of iodine in 60 parts of hydrogen peroxide solution. The solution is concentrated on a water bath to crystallization.—Apoth. Ztg. 1918, v. 33, p. 460, 473; Chem. Zentralbl. 1919, v. 1, p. 10.

AMMONII VALERAS.

Richmond, H. D., and Ainsworth, W. T. T.: A method for the examination of valerianates is described.—Pharm. J. Lond. 1919, v. 103, p. 83.

AMYLIS NITRIS.

Sundquist, H., and Mohlin, E.: Ammonium tetroxalate was identified as a decomposition product of amyl nitrite. Bödtker's metatetracarbonic acid is considered erroneous.—Svensk farm. Tidskr. 1919, v. 23, p. 626–628.

Anon.: Many samples of amyl nitrite failed to comply with the requirements of the Ph. Brit., that 90 per cent should distill below 100° C. The specific gravities, however, are usually within the Ph. Brit. limits of 0.870 to 0.880.—Evans' An. Notes, 1919, p. 21.

AMYLUM.

Wischo, F.: The preparation of starch almost free from saponins and fulfilling pharmaceutical requirements from horse-chestnuts is described.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 49–50; Chem. Zentralbl. 1919, v. 90, p. 46–47; J. Soc. Chem. Ind. 1919, v. 38, p. 785A.

Heiduschka, A.: Notes on the utilization of horse-chestnuts for the preparation of starch.—Pharm. Zentralh. 1918, v. 59, p. 291-293; J. Soc. Chem. Ind. 1919, v. 38, p. 49A.

Pantanelli, E.: A note on *Arum italicum* as a possible source of starch.—Staz. sper. agrar. ital. 1918, v. 51, p. 69, through Pharm. J. Lond. 1919, v. 103, p. 217.

Unna, E.: A micro-colorimetric method for the identification of wheat, rye, and potato starches in the presence of one another is described.—Ztschr. Unters. Nahr.—u. Genussm. 1918, v. 36, p. 49; J. Soc. Chem. Ind. 1919, v. 37, p. 746A.

Small, James C.: A method for the quantitative determination of soluble starch in the presence of starch and its hydrolytic cleavage products is described. The method depends upon the precipitation of the iodide of soluble starch from its solution by means of ammonium sulphate.—J. Am. Chem. Soc. 1919, v. 41, p. 107-112.

Small, James C.: A method for the preparation of soluble starch. Raw potato starch is boiled in a reflux condenser in 95 per cent alcohol containing varying amounts of hydrochloric acid.—J. Am. Chem. Soc. 1919, v. 41, p. 113-120.

Reutter: Soluble starch is prepared by the action of sulphuric acid on a starch suspended in alcohol.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 701.

Mellanby, John: Studies on the composition of starch. I. Precipitation by colloidal iron. II. Precipitation by iodine and electrolytes.—Biochem. J. 1919, v. 13, p. 28-36.

von Kaufmann, W., and Lewite, A.: A discussion of the nature of solutions of starch in formalin. Unchanged starch may be recovered quantitatively from such mixtures by precipitation with alcohol. The colorations with iodine which such solutions produce may be explained in terms of colloid chemistry.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 616-627.

Jacoby, Martin: A report of studies relative to the supposed degradation of starch by formaldehyde. It is concluded that formaldehyde does not break down the starch molecule.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 558-562; see also Hermann Sallinger, ibid., p. 651-656, and J. Wohlgemuth, Biochem. Ztschr. 1919, v. 94, p. 213-224.

Kolthoff, I. M.: The influence of various factors on the sensitivity of the starch iodide color change was studied.—Pharm. Weekblad, 1919, v. 56, p. 393-404.

Sollmann, Torald: Corn starch, used as a dusting powder, is found to absorb 80 per cent of its weight of water.—J. Am. M. Assoc. 1919, v. 72, p. 935-936.

ANGELICÆ FRUCTUS, N. F.

Styger, Jos.: A contribution to our knowledge of the anatomy of the fruits of different species of angelica.—Schweiz. Apoth.-Ztg. 1919, v. 56, p. 188, 199–200.

ANISUM.

Styger, Jos.: A report of a study of the anatomy of the fruits of *Pimpinella Anisum* L. and other species of *Pimpinella*.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 105–107.

Tonina, T. A.: Illustrated descriptions of the chief varieties of anise studied in an investigation of an epidemic of poisoning from false anise.—Semana Médica, Buenos Aires, 1919, v. 26, p. 294, through J. Am. M. Assoc. 1919, v. 72, p. 1799.

Anon.: The Bureau of Chemistry reports that in a large number of instances in the importation of "anise seed," seeds of exhausted anise have been substituted for the true material up to as high as 70 per cent.—S. R. A. Chem. 1918, No. 23, p. 100.

ANTIMONII ET POTASSII TARTAS.

Mazza, S.: Tartar emetic by the vein has been found a specific for papillomatous lesions.—Prensa Medica Argentina, Buenos Aires, 1918, v. 5, p. 183, through J. Am. M. Assoc. 1919, v. 72, p. 689-690.

Low, George C.: From the results obtained by the intravenous injection of tartar emetic in a case of kala-azar, it is concluded that the drug is a specific against *Leishmania donovani*.—Brit. M. J. 1919, v. 1, p. 702–704.

Innes, Arthur: A report on the use of tartar emetic in the treatment of bilharzial infection.—Brit. M. J. 1919, v. 2, p. 340–342.

Christopherson, J. B.: A defense of the use of antimony tartrate in bilharziosis and tachycardia.—Brit. M. J. 1919, v. 1, p. 580.

Low, George C., and Newham, H. B. C.: A report of a series of cases of bilharziosis treated successfully by intravenous injections of tartar emetic.—Lancet (The), London, 1919, v. 197, p. 623–636.

ANTIMONIUM SULPHURATUM, N. F.

DeBacho, F.: Some experimental observations on the origin and nature of gray-black antimony trisulphide.—Ann. chim. applicata, 1919, v. 12, p. 143–152.

Velés, R.: A brief review of the methods given in the literature for the examination of commercial antimony pentasulphide. The methods also take into account the determination of antimony trisulphide.—Rev. prod. chim. 1919, v. 22, p. 199–201; Chem. Abstr. 1919, v. 13, p. 1681.

ANTIPYRINA.

Meyera, A.: A résumé of the methods of manufacture of the principle pyrazole derivatives employed as dyes or medicaments. The chief medicaments in the group are antipyrine and pyramidon.—Chim. et Ind. 1919, v. 2, p. 780–788, through J. Soc. Chem. Ind. 1919, v. 38, p. 792A.

Sanchez, Juan A.: A report of some new functional reactions of antipyrine, and of a new general reagent with a phenolic function.—Farm. Españ. 1919, v. 51, p. 264–265.

Palet, Luciano P. J.: A new sensitive reaction for pyramidon and its differentiation from antipyrine. An aqueous solution of pyramidon gives a characteristic blue color and precipitate of Prussian blue with a few drops of a freshly prepared aqueous solution of $K_3Fe(CN)_6$ and Fe_2Cl_6.—Anales soc. quim. Argentina, 1918, v. 6, p. 151–155, through Chem. Abstr. 1919, v. 13, p. 216.

Bougault, J.: An investigation of the constitution and properties of an iodine derivative of antipyrine.—J. pharm. et chim. 1919, v. 20, p. 245–250.

Paderi, Cesare: A note calls attention to the incompatibility of calomel with antipyrine. The physiological properties of the combination of mercury and antipyrine, which is formed, are described.—Arch. farm. sper. 1919, v. 28, p. 113–124.

Richard, F.: Data obtained in the analysis of 12 commercial samples of antipyrine tablets are reported.—J. pharm. et chim. 1919, v. 19, p. 5–17.

Anon.: A report of a case in which painful eruptions resulted from the administration of antipyrine for the treatment of headache.—Chem. & Drug. Australas. 1919, v. 34, No. 3, p. 96.

APII FRUCTUS, N. F.

Farwell, O. A.: The proper name for the botanical source of the plant yielding celery seed is *Celeri graveolens* (Linné) Britton.—Brit. Circ. 1919, v. 63, p. 49.

Styger, Jos.: Notes on the source and microscopical characteristics of the fruits of *Apium graveolens.*—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 69.

APOMORPHINÆ HYDROCHLORIDUM.

Winterstein, E.: Studies on the constitution of apomorphine. Apomorphine hydrochloride yields on oxidation with dilute solution of potassium ferricyanide, a substance soluble in benzol with the production of an intense amethyst-violet color. This is an exceedingly delicate test for apomorphine.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 133–137.

Anon.: Guglialmelli's reagent affords an extremely delicate method of detecting apomorphine. The reagent is prepared by boiling 10 grams of sodium tungstate, 2 grams of sodium molybdate, and 10 grams of pure arsenic acid with 70 cubic centimeters of water for one-half hour under a reflux condenser, cooling, and adding water to make 100 cubic centimeters.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 34; Pharm. J. Lond. 1919, v. 102, p. 199.

Zoccola, Francesco: A study of the changes which take place in morphine, apomorphine, and cocaine solutions during sterilization.—Giorn. farm. chim. 1918, v. 67, p. 60–64, 90–96.

AQUA.

Anon.: A general discussion of reasons for making chemical, bacterial, and physical analyses of water.—Munic. J. 1919, v. 46, p. 131–132, through Chem. Abstr. 1919, v. 13, p. 1730.

Bancroft, Wilder D.: A review of the literature on the color of water.—J. Franklin Inst. 1919, v. 187, p. 249–271, 459–485.

Harkins, William D., and Brown, F. E.: Data obtained in the determination of the surface tension of water and benzene at 20° C. by the capillary rise method are presented.—J. Am. Chem. Soc. 1919, v. 41, p. 499–524.

Narbutt, J.: An empirical equation for the calculation of the specific heat of water.—Physik. Ztschr. 1918, v. 19, p. 513–514.

Richardson, F. W.: A description of a ready method for the extraction and estimation of dissolved gases in water.—J. Soc. Chem. Ind. 1919, v. 38, p. 32–33T.

Ling, A. R.: A method for the detection of hypochlorites in water is based on their ability to liberate iodine from iodides in the presence of sulphuric acid.—Analyst (The), London, 1918, v. 43, p. 347–348.

Herbig, W.: From experiments, it is concluded that the carbonate hardness of water has little, if any, effect upon the titration of chlorides with silver nitrate, using potassium chromate as an indicator.—Ztschr. angew. Chem. 1919, v. 32, part 1, p. 216.

Baughman, W. F., and Skinner, W. W.: A report of studies in the determination of bromides and iodides in mineral waters and brines.—J. Ind. & Eng. Chem. 1919, v. 11, p. 563–568, 954–959.

Czensny, R.: Notes on the estimation of free carbonic acid in water. The titration method is compared with the method of Winkler.—Ztschr. anal. Chem. 1919, v. 58, pl. 1–2; Analyst (The), London, 1919, v. 44, p. 245.

Klut, Hartwig: Analytical data relative to the determination of free carbon dioxide in drinking water are presented. A bibliography is appended.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 344–359.

Anon.: Details of a method for estimating the hardness of water using potassium palmitate as the titrating agent are given.—Eng. Contr. 1919, v. 51, p. 470, through Chem. Abstr. 1919, v. 13, p. 1730.

Frederick, Robert C.: An improved method for the estimation of nitrates in water makes use of the phenolsulphonic acid reaction.—Analyst (The), London, 1919, v. 44, p. 281–284.

Herbig, W.: It is concluded from the results of experiments that carbonate hardness does not affect the determination of chlorine in water.—Ztschr. angew. Chem. 1919, v. 32, p. 216; J. Soc. Chem. Ind. 1919, v. 38, p. 652A.

Wood, D. R.: Studies in the bacteriology of water. The different methods which have been proposed for the differentiation of human and animal excreta are reviewed. The American practice of using the Voges-Proskauer reaction along with the methyl red test is compared with other methods.—Water Engineer, 1919, v. 21, p. 184–188 through Chem. Abstr. 1919, v. 13, p. 3260.

Stein, M. F.: A critical study of the bacterial count in water and sewage. For ordinary work 3, and for accurate work 5 to 10 platings from a single sample are recommended.—Am. J. Pub. Health, 1919, v. 8, p. 820–829.

DeWaal, J. W.: A review of standard methods for the detection of *B. coli* in potable waters.—Pharm. Weekblad, 1919, v. 56, p. 1065-1070.

AQUA DESTILLATA.

Clevenger, C. B.: An illustrated description of a rapid and convenient method for the preparation of water intended for use in conductivity work.—J. Ind. & Eng. Chem. 1919, v. 11, p. 965–966.

Jermstad, Axel and Gaule, Alice: A study of the action of tin on distilled water and on aqueous solutions of medicinal substances.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 89–92, 109–113.

AQUA DESTILLATA STERILISATA.

Cook, E. F., and Gershenfeld, Louis: Suggestions for the preparation of sterilized distilled water according to the U. S. P. method. It is suggested that the autoclave method for preparing sterilized distilled water be used, if practicable, and that this method be given recognition in the U. S. P. text.—J. Am. Pharm. Assoc. 1919, v. 8, p. 116–120.

AQUÆ AROMATICÆ.

Hommell, P. E.: Those waters prepared by triturating the volatile oil with talc and adding the required amount of distilled water are stated to be unsatisfactory. It is suggested that the U. S. P.

revision committee make a study of this subject with the view to improving the method of preparation.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

Crouzel, Ed.: A note on the preparation and use of saturated bromoform water. The author suggests that this water replace the solution of bromoform official in the French pharmacopœia.—Répert. Pharm. 1919, v. 30, p. 225–226.

AQUA AMMONIÆ.

Auger: An account of the estimation of ammonium hydroxide and hydrochloric acid in solution by weighing as ammonium chloride.—Bull. soc. chim. France, 1919, v. 23, p. 467–472. See also Villiers, Ann. chim. anal. chim. appl. 1919, v. 1, p. 51–52.

Bachman, Gustave: Not one of the 9 samples of ammonia water analyzed was of U. S. P. strength. The percentage of ammonia ranged from 2.5 to 2.4.—Proc. Minnesota Pharm. Assoc. 1919, p. 133.

Jongwald, Mattys: Of 30 samples of ammonia water analyzed, 22 were below standard.—Proc. North Dakota Pharm. Assoc. 1919, p. 58.

AQUA AMYGDALÆ AMARÆ.

Holdermann, Richard: A note on cherry laurel water and on an artificial method for the preparation of bitter almond water. Bitter almond water is prepared by distilling a mixture of potassium ferrocyanide and sulphuric acid, diluting the distillate with water to the proper hydrocyanic acid content, adding an excess of benzaldehyde and filtering.—Arch. Pharm. 1919, v. 257, p. 67–71.

Lautenschläger, L.: A method for the determination of benzaldehyde in bitter almond water consists in adding a measured amount of hydrazine solution and titrating the excess of hydrazine after standing.—Arch. Pharm. 1918, v. 256, p. 89, through Pharm. Zentralh. 1919, v. 60, p. 315.

van Os, D.: Certain desired modifications in the requirements of the Ph. Ndl. IV for cherry laurel water are described and discussed.—Pharm. Weekblad, 1919, v. 56, p. 769–770.

de Thouars, G. O. A.: A comparative study of nine varieties of *Laurocerasus* for the purpose of determining which species is the most suitable for the preparation of cherry laurel water.—Pharm. Weekblad, 1919, v. 56, p. 790–793.

AQUA AURANTII FLORUM FORTIOR.

Roberts, J. G.: One lot of stronger orange flower water examined was not up to the U. S. P. requirements and was of undesirable quality. It had a decided yellowish color, contained mucoid growths and yielded about 70 times more residue after the evaporation of 100 cubic centimeters than is permitted by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 92; J. Am. Pharm. Assoc. 1919, v. 8, p. 758.

AQUA CAMPHORÆ.

Hommell, P. E.: The formula for camphor water should be simplified by directing that the proper amount of gum camphor be shaken with recently boiled distilled water. Camphor water prepared in this manner will keep well and will always prove dependable.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

AQUA CHLOROFORMI.

Crouzel, E.: Attention is directed to the value of chloroform water as a vehicle for medicines. It is stated to be an excellent antiseptic and antifermentative for organic substances, especially in warm weather.—Répert. Pharm. 1919, v. 29, p. 4.

AQUA CREOSOTI.

Hommell, P. E.: Creosote water should be deleted from the U. S. P., as it possesses but little therapeutic value and is seldom prescribed.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

AQUA HAMAMELIDIS.

Hommell, P. E.: It is noted that a working formula for hamamelis water was eliminated from the U. S. P. because but few pharmacists would attempt to produce it. The proper place for this article is in the N. F. While it enjoys considerable repute among the laity, such is not the case professionally.—Proc. New Jersey Pharm. Assoc. 1919, p. 41.

Scofield, Walter W.: Of 27 samples of hamamelis water examined, 6 were rejected.—Rep. New Jersey Dept. Health, 1919, p. 85–87.

Bailey, E. M.: All of 14 samples of extract of witch hazel examined were of satisfactory quality.—Bull. Connecticut Agric. Exper. Sta. 1919, No. 219, p. 246–247.

AQUA PHENOLATA, N. F.

Diner, Jacob: It is suggested that carbolic acid water be deleted from the N. F. as it is merely a 2 per cent solution of phenol rarely used and which can easily be made extemporaneously when desired.—J. Am. Pharm. Assoc. 1919, v. 8, p. 95.

AQUA ROSÆ FORTIOR.

Roberts, J. G.: One lot of stronger rose water failed to comply with the U. S. P. requirements and was of very undesirable quality.

It had a decided yellowish color, contained mucoid growths, and yielded about 63 times more residue after the evaporation of 100 cubic centimeters than is permitted by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 92; J. Am. Pharm. Assoc. 1919, v. 8, p. 757.

ARGENTI NITRAS.

Wasicky, R.: Microchemical methods for the detection of copper impurities in silver nitrate are described.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 305–306.

Liebert, F.: A stable solution of silver nitrate is obtained by exposing the aqueous solution to light until all of the organic matter has reacted and then filtering through asbestos.—Chem. Weekblad, 1919, v. 16, p. 74.

ARGENTUM (NONOFFICIAL COMPOUNDS).

Anon.: Data are given showing the silver content of silver albuminate and similar salts.—Evans' An. Notes, 1919, p. 86–87.

Maue, G.: Methods for the recovery of silver from solutions containing the albuminate are described.—Chem. Ztg. 1918, v. 42, p. 513; Pharm. Weekblad, 1919, v. 56, p. 889–890.

Rupp: To determine quantitatively the silver in " itrol " or " actol," 0.2 gram of the material is dissolved in 20 cubic centimeters of dilute nitric acid, a small amount of ferric sulphate test solution is added, and the mixture is titrated with N/10 sulphocyanide solution to a brownish-red color.—Arch. Pharm. 1918, v. 256, p. 195.

Voigt: A preliminary report on the behavior of protected silver hydrosols in electrolyte solutions and blood serum. Collargol and dispargen were tested.—Biochem. Ztschr. 1919, v. 96, p. 248–259.

Bruns, Henry D.: A report on the usefulness of argyrol in the treatment of certain diseases of the eye.—New Orleans M. & S. J. 1919, v. 71, p. 425–435.

Bottner, A.: Notes on the production of anaphylaxis by means of collargol and on the significance of this phenomenon with respect to human anaphylaxis.—Deutsch. Arch. klin. Med. 1918, v. 125, p. 1–22.

Nagai, S.: Erythema produced by the intravenous injection of collargol is reported.—Japanese Med. Lit. 1919, v. 4, p. 24.

ARNICA.

Alsberg, Carl, et al.: A large number of samples offered for importation as " arnica flowers " consisted of the flower heads of *Inula britannica* L.—J. Am. Pharm. Assoc. 1919, v. 8, p. 480.

Hommell, P. E.: Arnica and its tincture should be placed in the N. F. As a vulnerary for sprains and bruises it is of occasional service, but aside from this its exhibition is useless.—Proc. New Jersey Pharm. Assoc. 1919, p. 39.

ARSENI TRIOXIDUM.

Anon.: The white arsenic produced in the United States in 1918 amounted to 6,323 short tons. The greater part of the amount consumed in the United States was used in preparing insecticides and weed killer.—Drug & Chem. Markets, 1919, v. 5, No. 69, p. 9.

Kolthoff, I. M.: Iodometric studies. VII. A study of the reaction between arsenic trioxide and iodine, with special reference to the titration of the former.—Pharm. Weekblad, 1919, v. 56, p. 621–634.

ARSENIC (NONOFFICIAL COMPOUNDS).

Krumwiede, H. A.: A brief outline of the more important steps in the manufacture of arsphenamine and neoarsphenamine.—J. Am. Pharm. Assoc. 1919, v. 8, p. 795–799.

Lewis, H. F.: A review of the American patent literature on arsphenamine (salvarsan) and other arsenicals.—J. Ind. & Eng. Chem. 1919, v. 11, p. 141–145.

Anon.: A review of a volume by Gilbert T. Morgan entitled *Organic Compounds of Arsenic and Antimony*.—Chem. Weekblad. 1919, v. 16, p. 156–157.

Jacobs, Walter A., and Heidelberger, Michael: Aromatic arsenic compounds. I. A plan of procedure for the synthesis of arsenicals for chemotherapeutic research.—J. Am. Chem. Soc. 1919, v. 41, p. 1581–1587; for subsequent articles see ibid. p. 1587–1600, 1600–1610, 1610–1644, 1809–1840.

Jacobs, W. A., and Heidelberger, M.: N-phenylglycineamide-p arsenic acid is a compound containing pentavalent arsenic which can be simply and inexpensively made, and has other qualities which render it likely to be suitable in the treatment of experimental trypanosome and spirochaete diseases.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 501–502.

Fargher, Robert G.: A report of investigations dealing with the preparation, properties, and analysis of the substituted phenylarsinic acids. A modified Lehman's method for the determination of arsenic in these compounds is described.—J. Chem. Soc. Lond. 1919, v. 115, p. 982–992.

Rogers, L. Joslyn: A description of a method for the determination of arsenic in organic compounds such as salvarsan. Ammonium persulphate in nitric acid solution is employed for the decomposition of organic matter. One-half gram is decomposed to water-white color in 15 to 20 minutes.—Canadian Chem. J. 1919, v. 3, p. 398.

Anon.: A method is described for the determination of arsenic in atoxyl and arsacetin.—Pharm. Zentralh. 1919, v. 60, p. 194.

Perutz, A.: Notes on the diazo reaction for the identification of salvarsan and neosalvarsan.—Wien. klin. Wchnschr. 1919, p. 1009, through Pharm. Weekblad, 1919, v. 56, p. 1572–1573.

François: A note on the spontaneous alteration of crystalline atoxyl. Upon standing, the compound was found to lose water of crystallization and part of the organically combined arsenic was found to be converted into inorganic arsenic. An abstract.—J. pharm. et chim. 1919, v. 19, p. 70–72.

Pearce, Louise, and Brown, W. H.: A study of the biological action of N-phenylglycineamide-p-arsenic acid. In experimental syphilis, relatively large doses were required to free the chancre lesions of spirochætes, but small doses caused very rapid regression and healing of the lesions without total disappearance of the organism.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 502–503.

Giemsa, G.: Notes on the chemotherapy of certain arsenobenzenes, especially arsalyte.—Deutsch. med. Wchnschr. 1919, v. 45, p. 94.

Bergmann, H.: An article dealing with the distribution of arsenic in the tissues after the use of salvarsan and similar drugs.—Biochem. Ztschr. 1918, v. 90, p. 348–360, through Physiol. Abstr. 1919, v. 3, p. 571.

Mehrtens, H. G., and McArthur, C. G.: A report of an investigation to determine the arsenic penetration of the meninges during treatment of neurosyphilis.—Proc. Soc. Exper. Biol. & Med. 1919, v. 16, p. 99–100.

Kolle, W.: A report of experimental studies with Ehrlich's salvarsan and with some new salvarsan preparations.—Deutsch. med. Wchnschr. 1918, v. 44, p. 1177–1181, 1211–1215; Chem. Zentralbl. 1919, v. 1, p. 116.

Anon.: The important precautions to be observed in the administration of arsphenamine and neoarsphenamine are stated.—Public Health Rep. 1919, v. 34, No. 21, p. 1131–1133.

Lockhart, W. T., and Atkinson, J. R.: Observations on the administration of arsenic in syphilis.—Brit. M. J. 1919, v. 1, p. 33–35.

Schamberg, Jay Frank: A comparison of arsphenamine with neoarsphenamine in the treatment of syphilis shows the latter to be less active therapeutically than the former, but the difference appears to be made up by the discrepancy in the tolerated dose.—J. Am. M. Assoc. 1919, v. 73, p. 1883.

Vasconcelos, A. B.: Arsphenamine versus neorsphenamine. The author has found the former to be the more effective. He employs neoarsphenamine for patients with heart lesions, tendency to hemorrhage or with veins difficult of access, for the very nervous and for children.—Revista Medica, Puebla, Mexico, 1918, v. 1, p. 101, through J. Am. M. Assoc. 1919, v. 72, p. 690.

Sicard, J. A., and Roger, H.: Chronic arsenic poisoning. The disturbances following the use of the new arsenic drugs are classified under three types.—Bull. soc. med. hop. Paris, 1918, v. 42, p. 181, through Physiol. Abstr. 1919, v. 3, p. 534.

Lynch, Thomas J., and Hoge, Solomon F.: Cases of toxic jaundice following "intensive" treatment of syphilis with arsenic compounds are reported.—J. Am. M. Assoc. 1919, v. 73, p. 1687–1691.

De Hass, H. K.: A report on affectations of the retina and optic nerve caused by arsenic poisoning. Arsenic was detected in the urine of 55 out of 58 patients with inflammatory modifications of the retina and optic nerve.—Arch. Ophth. 1919, v. 99, p. 16.

Arsphenamine.—Kober, Philip Adolph: Notes on the preparation of salvarsan, with special reference to the advantages of the author's salting-out method over the method of precipitating with methylethyl alcohol.—J. Am. Chem. Soc. 1919, v. 41, p. 442–451.

Anon.: A note calls attention to a specimen of spurious salvarsan which, upon examination, was found to be a yellow powder composed of lead chromate, gypsum, and barytes.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 479.

Anon.: A note calls attention to an adulterated sample of salvarsan which consisted entirely of cleaning sand and colored chalk.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 333.

Rieger, John B.: From an investigation it is concluded that arsphenamine may contain an arseniuretted methyl compound which decomposes either in the ampoule or in solution, with the liberation of arsenous oxide or a cacodyl-like substance.—J. Lab. & Clin. Med. 1919, v. 4, p. 181–185.

Skutezky, Karl: The injuries resulting from the use of salvarsan are attributed to the fact that salvarsan may undergo considerable oxidation before there is a color change in the solution.—Wien. klin. Wchnschr. 1919, v. 32, p. 142–143, through Chem. Zentralbl. 1919, v. 1, p. 673.

Kaufmann, R.: Salvarsan solutions are rendered stable by the addition of "hydraldid," "rongalit," or sodium sulphite.—Dermatol. Ztschr. 1919, v. 28, p. 35, through Therap. Monatsh. 1919, v. 33, p. 433.

Engwer and Josephsohn: It has been observed that better results are obtained in salvarsan treatment if the stomach is emptied several hours previous to administration and no food given until several hours after the injection has been completed.—Münch. med. Wchnschr. 1919, v. 66, p. 243–244, through Chem. Zentralbl. 1919, v. 1, p. 882.

Hirano, H.: Experimental studies on the investigation of the nature of anaphylactoid reaction caused by the repeated injection of salvarsan are reported.—Kitasato Archives of Exper. Med. Tokyo, 1919, v. 3, p. 1, through J. Am. M. Assoc. 1919, v. 72, p. 1947.

Stokes, J. H.: A discussion of the nature of the acute nitritoid reaction following the intravenous injection of arsphenamine and a report of attempts to use atropine to induce antianaphylaxis.— J. Am. M. Assoc. 1919, v. 72, p. 241–243.

Dührssen, A.: An argument against the use of salvarsan in syphilis.—Deutsch. med. Wchnschr. 1919, v. 45, March 6, through Med. Rec. 1919, v. 95, p. 1020.

Guy, William H.: A report of reactions in a series of 25,000 injections of arsphenamine. The author considers the arsphenamine marketed to-day a comparatively safe product.—J. Am. M. Assoc. 1919, v. 73, p. 901–904.

Hyman, Albert S.: A report of results obtained in the administration of arsphenamine at the Long Island Hospital, with descriptions of the method of administration and the apparatus employed.—Boston M. & S. J. 1919, v. 181, p. 353–361.

Rappleye, W. C.: Notes on the effect of diarsenol given intravenously.—J. Lab. & Clin. Med. 1919, v. 4, p. 630–634.

Sicard, et al.: It is stated that arsphenamine damages the liver and the amount of this injury is reflected in the urea content of the blood. The manner in which intoxication may be detected is also discussed.—Bull. de la Société Medicale des Hôpitaux, Paris, 1919, v. 43, p. 833, through J. Am. M. Assoc. 1919, v. 73, p. 1858.

Beeson, B. B.: Certain reactions following the administration of arsenobenzol are thought to be due to suprarenal insufficiency. The author recommends intramuscular injection of one milligram of adrenaline 10 minutes previous to the intravenous injection of arsenobenzol.—Am. J. Syphilis, 1919, v. 3, p. 129.

Milian, G.: A discussion of the arsphenamine question with reference to the disturbances which may follow its use and to the dangers of injecting the solution too rapidly—Paris Médical, 1919, v. 9, p. 261, through J. Am. Assoc. 1919, v. 72, p. 1576–1577.

Milian, G.: It is concluded that arsphenamine has no affinity for the liver and that the jaundice that may develop under its administration is referable to the action of the disease (syphilis) on the liver.—Bull. de la Société Médicale des Hôpitaux, Paris, 1919, v. 43, p. 821, through J. Am. M. Assoc. 1919, v. 73, p. 1858.

Anon.: A discussion of the toxic manifestations of arsphenamine and the possibilities of combatting them.—J. Am. M. Assoc. 1919, v. 72, p. 1773.

Sutter, L. A.: A report of a case of gangrene following the injection of arsphenamine.—J. Am. M. Assoc. 1919, v. 73, p. 1611–1612.

Nagai, U.: A report of a case in which the injection of arsphenamine was followed by jaundice and pigmentation of the skin. The jaundice disappeared in 3 months, but the black pigmentation was still traceable after 7 months.—Bull. Naval Med. Assoc. Japan, 1919. No. 24, p. 3, through J. Am. M. Assoc. 1919, v. 73, p. 1727.

Schwerdstfeger, Otto M., and Tucker, Martin B.: A report of a case of pneumonia following the injection of arsenobenzene.—Am. J. Syphilis, 1919, v. 3, p. 398–403.

Sands, I. J.: A report of a case of general paralysis following intravenous injection of arsphenamine.—Arch. Neurology & Psychiatry, Chicago, 1919, v. 2, p. 41, through J. Am. M. Assoc. 1919, v. 73, p. 364.

Bory, L.: A report of a case of typical arsenical eclampsia developing the fourth day after the fourth injection of French arsphenamine, with an epileptiform attack, coma with mydriasis, stertor and death. Other similar cases are cited.—Bull de la Société Médicale des Hôpitaux de Paris, 1919, v. 43, p. 84, through J. Am. M. Assoc. 1919, v. 72, p. 1497.

Herner, A.: A severe case of necrosis of the cornea as a result of salvarsan poisoning is reported. An abstract.—Zentralbl. Biochem. u. Biophys. 1919, v. 20, p. 191.

Blanton, W. B.: A report of four fatalities following an intensive course of arsphenamine treatment, consisting of from four to six intravenous injections given at four-day intervals.—Am. J. Syphilis. 1919, v. 3, p. 648–660; J. Am. M. Assoc. 1919, v. 73, p. 1799.

Crofutt, E. F.: A report of a death from salvarsan.—U. S. Naval Med. Bull. 1919, v. 13, p. 543–546.

Goetsch, A.: A report of death following the administration of arsphenamine, with a discussion of the case.—U. S. Naval Med. Bull. 1919, v. 13, p. 797–799.

Latham, Joseph R.: A report of a fatal case of poisoning due to arsphenamine. Death resulted from the administration of 0.8 gram intravenously.—J. Am. M. Assoc. 1919, v. 73, p. 14–16.

Hoffman, Edmund: Two cases of death from salvarsan are reported.—Dermatol. Ztschr. 1919, v. 27, p. 65, through Zentralbl. Biochem. u. Biophys. 1919, v. 21, p. 176.

Sicard, J. A., and Roger, H.: Chronic intoxication in the case of arsenobenzol usually appears after the total amount administered has reach 10 to 12 grams.—Bull. de la Soc. Méd. des Hôpitaux de Paris, 1918, v. 42, p. 171, through J. physiol. et path. gén. 1919, v. 18, p. 388.

Hazen, H. H.: It has been demonstrated that a patient will stand as many as 10 injections of arsphenamine at 72-hour intervals with perfect impunity; that much time is saved and conditions are brought to normal much more quickly than with weekly injections.—Southern Med. J. 1919, v. 12, p. 371–373.

Duhrssen, A.: It is recommended that a maximal dose for salvarsan be established.—Deutsch. med. Wchnschr. 1919, v. 45, p. 267–268.

Wechselmann: A discussion of the dosage of salvarsan. The difficulty of fixing a suitable maximal dose is pointed out.—Deutsch. med. Wchnschr. 1919, v. 45, p. 458–459.

Joachimoglu, G.: A discussion of the question of maximal doses of salvarsan. The fixing of a maximal dose is not considered necessary.—Deutsch. med. Wchnschr. 1919, v. 45, p. 375–376.

Fournier, Louis, and Guenot, L.: A note calls attention to the abortive action of arsenobenzol in syphilis when administered during the period of incubation.—Presse Médicale, 1919, v. 27, p. 554–555.

Sachs, B.: A note on the use of arsphenamine in syphilis of the nervous system. Satisfactory results are claimed from intravenous injections administered on alternate days for a period of three or four weeks, then allowing a period of complete rest, or giving weekly or semiweekly injections of mercuric salicylate for four to six weeks and then again arsphenamine injections.—Arch. Neurology & Psychiatry, Chicago, 1919, v. 1, p. 277, through J. Am. M. Assoc. 1919, v. 72, p. 894.

Bruhl, I., and Franck, M.: A report of the use of arsphenamine in 38 cases of influenza. The death rate among the cases treated was 21 per cent.—Bull. de la Société Médicale des Hôpitaux, Paris, 1918, v. 42, p. 1183, through J. Am. M. Assoc. 1919, v. 72, p. 966.

Kolle, W.: Experimental studies on the salvarsan treatment of spirochetal diseases are reported.—Deutsch. med. Wchnschr. 1918, v. 44, Oct. 24 and 31, through Med. Rec. 1919, v. 76, p. 118–119.

Peisseau, G., and Hutinel, J.: Evidence is given that the combination of arsphenamine with quinine is more effective than the latter alone in the treatment of malaria.—Paris Médical, 1919, v. 9, p. 216, through J. Am. M. Assoc. 1919, v. 72, p. 1398.

Neoarsphenamine.—Herzog, J.: A sample of neosalvarsan examined was found to consist of crude calcium sulphate contaminated with barium sulphate, strontium sulphate, and lead chromate.—Apoth.-Ztg. 1919, v. 34, p. 211–212.

Goodman, Herman: A report on 241 injections of neodiarsenol (Canadian neoarsphenamine) which were given without any ill effects being produced. The method of preparing the drug for intravenous use is described.—Med. Rec. 1919, v. 95, p. 637–638.

Leonard, L. G.: An investigation of the comparative value of novarsenobillon when administered by the intravenous and intramuscular methods.—Brit. M. J. 1919, v. 2, p. 266–269.

Nathan, E., and Reinecke, H.: A note on the action of sulfoxylatsalvarsan.—Deutsch. med. Wchnschr. 1919, v. 45, p. 17–19; Chem. Zentralbl. 1919, v. 2, p. 307.

Gsell, J. L.: A report of a case of severe anthrax which was arrested by intravenous injection of neoarsphenamine. A total of 0.75 gram was injected in 2 days and improvement was evident at once.—Corrêspondenz-Blatt für Schweizer Aertze, Basel, 1918, v. 48, p. 1505, through J. Am. M. Assoc. 1919, v. 72, p. 77.

Burchfiel, C. M.: A report of arsenic poisoning following the administration of neoarsenobenzol.—U. S. Naval Med. Bull. 1919, v. 13, p. 795–796.

Castello, V. Pardo: A report of accidents from arsenical treatment of syphilis. Serous apoplexy or hemorrhagic encephalitis developed in one case three days after a second injection of neoarsphenamine.—Revista de Medicina y Cirugia, Havana, 1919, v. 24, p. 395, through J. Am. M. Assoc. 1919, v. 73, p. 1171.

Leonard, L. G.: A report of a case of severe dermatitis during treatment with novarsenobillon.—Brit. M. J. 1919, v. 2, p. 773–774.

Weinberg: Cases of uterine hemorrhage following the administration of neosalvarsan are reported.—Münch. med. Wchnschr. 1919, v. 66, p. 98–99, through Zentralbl. Biochem. & Biophys. 1919, v. 20, p. 511.

Sicard et al.: Evidence is presented to show that neoarsphenamine is responsible for the jaundice that frequently develops during treatment with the drug.—Bull. de la Soc. Méd. des Hôpitaux, Paris, 1919, v. 43, p. 880, through J. Am. M. Assoc. 1919, v. 73, p. 1965.

Petrén, K.: Notes on the primary toxic effect of neosalvarsan as noted in its use in influenza-pneumonia.—Lancet (The), London, 1919, v. 197, p. 244.

Silver Arsphenamine.—Binz, A.: A method for the analysis of silver-sodium salvarsan is described.—Arbb. Inst. exp. Therapie Georg. Speyer Hause, 1919, v. 7, p. 43–47; Chem. Zentralbl. 1919, v. 90, p. 37; J. Soc. Chem. Ind: 1919, v. 38, p. 792A.

Lenzmann, R.: A report of experiences with silver-sodium salvarsan. It is found to be less toxic than other salvarsan preparations in effective doses and to be well tolerated.—Deutsch. med. Wchnschr. 1919, v. 45, p. 355–357.

Galewsky: A favorable report on silver-sodium salvarsan. It acts energetically in much smaller doses than neosalvarsan, due to the combination of metallic silver with the salvarsan radicle.—Deutsch. med. Wchnschr. 1918, v. 44, p. 1326–1327, through Med. Rec. 1919, v. 95, p. 293.

Knopf, Walter, and Sinn, Otto: Silver salvarsan seems to be the least objectionable of all the salvarsan preparations tried up to this time.—Deutsch. med. Wchnschr. 1919, v. 45, p. 517–518; Chem. Zentralbl. 1919, v. 3, p. 70–71.

Hahn, F.: Silver salvarsan is stated to be superior to other arsenic compounds as a therapeutic agent in syphilis because of the ease with which it can be administered, its efficacy, and the absence of unfavorable results.—Deutsch. med. Wchnschr. 1918, v. 44, Dec. 12, through Med. Rec. 1919, v. 95, p. 619.

Nolten: A review of the literature on silver salvarsan and a report on its use in 50 cases of syphilis. It is concluded that it is more active than salvarsan.—Deutsch. med. Wchnschr. 1919, v. 45, p. 987–989.

von Notthafft: A report of experiences with silver salvarsan. Satisfactory results were obtained with smaller doses than are necessary in the case of salvarsan and just as quickly. Deutsch. med. Wchnschr. 1919, v. 45, p. 341–346.

Schönfeld, W., and Birnbaum, G.: A report of the results of experiments with silver salvarsan, with special reference to the behavior of the Wassermann reaction.—Münch. med. Wchnschr. 1919, v. 66, p. 1087–1089, through Chem. Zentralbl. 1919, v. 3, p. 927.

Gennerich: A report of favorable experiments in the treatment of syphilis by means of silver salvarsan.—Deutsch. med. Wchnschr. 1918, v. 44, p. 1243–1247; Chem. Zentralbl. 1919, v. 2, p. 132.

Fabry: Notes on the treatment of syphilis with silver salvarsan. The injection should be made with great caution and it is necessary that the dose be smaller than with other salvarsans.—Deutsch. med. Wchnschr. 1919, v. 45, p. 1358–1359.

Dreyfuss, G. L.: Silver salvarsan is stated to be three times as active as salvarsan and to be superior to the latter in the treatment of syphilis of the nervous system.—Münch. med. Wchnschr. 1919, v. 66, p. 864–869.

Dreyfuss, G. L.: Notes on some by-effects of silver salvarsan.—Deutsch. med. Wchnschr. 1919, v. 45, p. 1326–1328.

Kolle, W., and Ritz, H.: A report of experimental investigations of the effect of silver and its compounds, especially silver salvarsan, on syphilis in rabbits.—Deutsch. med. Wchnschr. 1919, v. 45, p. 481–483.

Anon.: Brief notes on the preparation, properties and uses of silver salvarsan.—Pharm. Ztg. 1919, v. 64, p. 806.

ASAFŒTIDA.

Hommell, P. E.: It is wondered why the emulsion, pill, and tincture of asafetida is continued in the U. S. P. While the pure drug possesses some mild expectorant and antispasmodic action, yet of all therapeutic agents, this is most frequently found impure and adulterated, and unless it answers the tests for purity, according to the U. S. P., how can any medical value of consequence be derived from it.—Proc. New Jersey Pharm. Assoc. 1919, p. 39.

Ewing, C. O., and Viehoever, Arno: The U. S. P. allows 30 per cent of ash in powdered asafetida to permit the use of magnesium carbonate as a diluent. When starch is used as a diluent, an extremely dirty product may be made to comply with the 30 per cent standard. It is, therefore, suggested that the use of magnesium carbonate be discontinued. The adoption of a standard for acid-insoluble ash would not interfere with the use of magnesium carbonate as a diluent.—J. Am. Pharm. Assoc. 1919, v. 8, p. 726.

Keenan, F. J.: Seven samples of asafetida examined yielded alcohol-soluble matter ranging from 18.6 to 73.6 per cent and ash varying from 4.7 to 62 per cent. The U. S. P. requires not less than 60 per cent alcohol-soluble matter nor more than 15 per cent ash.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 83; J. Am. Pharm. Assoc. 1919, v. 8, p. 670.

Claassen, Edo: A report of an analysis of a sample of gum asafetida. The sample contained calcite 35.51 per cent and granite 10.04 per cent.—Am. J. Pharm. 1919, v. 91, p. 164.

ASPIDIUM.

Anon.: Report of Sub-Committee on Male Fern. A discussion of methods for the assay of male fern, including Yagi's earthworm test. Data showing the amount of acetone-soluble and ether-soluble extractive matter are given for samples of *Aspidium marginale*, *A. Filix-mas*, and *A. spinulosum*, also the percentage of crude filicin.—Proc. Am. Drug Mfg. Assoc. 1919, p. 266–268.

Ishio, M., and Shimidzu, M.: A comparison of Japanese male fern with the European drug.—J. Pharm. Soc. Japan, 1919, No. 453, November, p. 905.

Leroux, Lucien, and Désiré: The ash content of male fern rhizome is given as 4.83 per cent. The following are the constituents of the ash: SO_3, 5 per cent; P_2O_5, 7.4 per cent; CaO, 10.1 per cent; MgO, 8.3 per cent; Fe_2O_3, 5.1 per cent; SiO_2, in large quantities.—Ann. chim. anal. chim. appl. 1919, v. 1, p. 208–209.

Éwe, G.: Three lots purporting to be male fern upon examination proved to be other members of the fern family.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 87.

Karrer, P.: A report of experiments in the synthesis of simple butyrophenones for the purpose of comparing their action with the teniafuge principles in male fern.—Helvetica Chim. Acta 1919, v. 2, p. 466–481.

ASPIDOSPERMA.

Hommell, P. E.: The U. S. P. gives the average dose of aspidosperma as 60 grains, while works on therapeutics advise 15 to 30 grains.—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

Wilcox, Reynold W.: Data relative to the composition, action, and therapeutics of aspidosperma are given.—Med. Rec., 1919, v. 96, p. 698–699.

ATROPINA.

McKenzie, Alex., and Wood, John K.: A report of experiments in the preparation of isomeric tropic acids.—J. Chem. Soc. Lond. 1919, v. 115, p. 828–840.

Kunz-Krause, H.: The mydriatic power of atropine was tested by placing dilute solutions in the eyes of cats and white rabbits. By this means it was found that $4.164\times^{10-6}$ grams of pure atropine was sufficient to dilate the pupil. The atropine in belladonna extract was found to be much less active, due presumably to adsorption by protective colloids.—Kolloid-Ztschr. 1919, v. 25, p. 136–140.

Liljestrand, G.: A study of the comparative action of atropine and l-hyoscyamine upon the isolated intestine indicates that they are identical in this respect. Both atropine and l-hyoscyamine are present in commercial preparations of either substance.—Arch. gesamt. Physiol. 1919, v. 175, p. 111–124.

Cushny, A. R.: From experiments, it is concluded that the highest activity in the tropeine series is attained only when asymmetric carbon is associated with hydroxyl.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 71–93.

Lapicque and Veil, C.: An experimental study of the action of atropine upon muscular tissue.—Compt. rend. soc. biol. 1919, v. 82, p. 153–155.

DeJeude, A. P. van L.: Data obtained in the quantitative determination of the antagonism of pilocarpine and atropine are reported.—Arch. ges. Physiol. 1918, v. 170, p. 523–552.

Stokes, J. H.: From experiments, it is concluded that the nitritoid crisis in the case of arsphenamine intoxication can be inhibited by the previous injection of 1/50 grain of atropine.—J. Am. M. Assoc. 1919, v. 72, p. 241–243.

Arnold, W.: A contribution on the therapeutic uses of atropine.—Berl. klin. Wchnschr. 1919, v. 56, p. 223.

AURANTII AMARI CORTEX.

Rustung, G.: Samples of bitter orange peel examined were frequently found to be adulterated with the green peel of Curaçao oranges.—Norges Apotek. Tidsskr. 1919, v. 27, p. 41–43, through Apoth.-Ztg. 1919, v. 34, p. 122.

BALSAMUM PERUVIANUM.

Mittelbach, Wm.: It is suggested that the word "balsam" be dropped in the titles for the balsams of Peru and Tolu. This would make the titles conform with that of copaiba.—Proc. Missouri Pharm. Assoc. 1919, p. 33.

Merrill, E. C.: From experiments, it is concluded that the determination of the iodine value of cinnamein by the Hanus's procedure is unsatisfactory and, furthermore, may be entirely inadequate as an index of the character of pure Peru balsam. The employment of such physical constants as viscosity, surface tension, optical rotation, and refractive index may prove of value in the final interpretation of the character of the balsam.—J. Assoc. Off. Agric. Chem. 1919, v. 3, p. 194–197.

van Itallie: After criticizing the official test given for this balsam in various pharmacopœias, a number of new tests are suggested. The chloroform and sulphuric acid test of some of the pharmacopœias for distinguishing between natural and artificial balsam is stated to be unreliable. A petroleum ether test, which is stated to be satisfactory for this purpose, is described.—Pharm. Weekblad, 1919, v. 56, p. 1185–1201.

Helch: Two methods recommended by Fromme and Dieterich for the testing of balsam of Peru are described.—Pharm. Post, 1919, v. 52, p. 61.

Denigès, G.: A method for the detection of balsam of Peru and balsam of Tolu is based on the identification of cinnamic acid by means of a ferric salt and hydrogen peroxide.—Bull. soc. pharm. Bordeaux, 1919, v. 57, p. 209–212.

Fourneau, Ernest, and Crespo, Mario: Decomposition with alcohol is recommended as a means of identifying the esters of the balsams of Peru and Tolu, styrax, and benzoin. The method, termed "alcoholysis," is described in detail.—Bull. soc. chim. France, 1919, v. 26, p. 386–389.

BALSAMUM TOLUTANUM.

van Itallie: Suggested tests for Tolu balsam: the total residue insoluble in chloroform should not exceed 3 per cent. On treating one gram of the sample with 20 grams of carbon disulphide, and evaporating, the residue should be crystalline; it should have no odor or taste of turpentine or resin; and should not gelatinize with 2 or 3 drops of solution of ammonia. Acid value, 110 to 160; saponification value, 160 to 210; total ash, 0.5 per cent.—Pharm. Weekblad, 1919, v. 56, p. 1185.

van Itallie: Data obtained in a chemical investigation of Tolu balsam are presented and discussed.—Pharm Weekblad, 1919, v. 56, p. 1195–1198.

Anon.: An account of work on the testing of samples of balsam of Tolu, including a table of the important chemical constants.—Evans' An. Notes, 1919, p. 22–25.

Denigès, G.: A method for the detection of balsam of Peru and balsam of Tolu is based on the identification of cinnamic acid by means of a ferric salt and hydrogen peroxide.—Bull. soc. pharm. Bordeaux, 1919, v. 57, p. 209-212.

Éwe, G.: Seven lots of balsam of Tolu examined contained alcohol-insoluble matter ranging from 0.5 to 5.8 per cent. They answered all other U. S. P. requirements.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 92.

BELLADONNÆ FOLIA.

de Graaff, W. C.: The cultivation of belladonna in Holland.—Pharm. Weekblad, 1919, v. 56, p. 1104–1105.

Holmes, E. N.: A letter from India states that *Atropa belladonna* growing at an elevation of 6,500 feet at the Kumaun Government Gardens in India contains a high percentage of alkaloids.—Pharm. J. Lond. 1919, v. 102, p. 2.

Koch, George P.: A report of an experimental study of the germination of belladonna seeds and the growth of belladonna plants under different conditions.—J. Am. Pharm. Assoc. 1919, v. 8, p. 390–405.

Tunmann, O.: No accumulation of alkaloid was found to follow injury to the leaves of *Atropa belladonna* L. or *Pilocarpus pennatifolius*, Lem., whether caused by animals or artificial methods.—Biochem. Ztschr. 1919, v. 95, p. 164–169.

Brizi, U.: A note calls attention to the appearance in the price lists of certain Italian firms of the names *Belladonna Phytolacca* and *Belladonna falsa*, which are intended as designations for the leaves of *Phytolacca decandra* and *Ailanthus glandulosa*. The practice is condemned on the ground that it is neither justified from the standpoint of botanical origin nor physiological action.—Boll. ital. piante med. 1919, v. 2, p. 19, through Bull. sc. pharmacol. 1919, v. 26, p. 492.

Sievers, Arthur F.: Analytical data are presented showing the effect of the presence of stems on the alkaloidal content of belladonna herb.—Am. J. Pharm. 1919, v. 91, p. 838–851.

Anon.: Samples of belladonna leaves examined during the period 1914–1919 gave an alkaloidal value which varied between 0.2 and 0.63 per cent, with a moisture content of 3.2 to 12 per cent. Three ash determinations gave 14.1, 16.3, and 15.9 per cent.—Evans' An. Notes, 1919, p. 27.

Rustung: The alkaloidal content of Norwegian belladonna leaves dried at 100°C. was found to be 0.43 per cent, the water content 8.76 per cent.—Norges Apoth. Tidskr. 1918, p. 381, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 339.

Hoyer, O.: The leaves of *Carpinus Betulus* have been identified as an adulterant of belladonna leaves. The botanical characteristics of these leaves are described in detail.—Ztschr. allgem. österr. Apoth. Ver. 1918, v. 56, p. 317, through Pharm. Zentralh. 1919, v. 60, p. 421-422.

Alsberg, Carl L., et al.: A shipment of belladonna recently received consisted of the leaves of *Solanum nigrum* L.—J. Am. Pharm. Assoc. 1919, v. 8, p. 468.

Éwe, G.: One lot of belladonna leaves examined was rejected, although assaying 0.5995 per cent alkaloids, as it was infested with insects. Two other lots offered as belladonna leaves consisted of *Solanum nigrum* (common black garden cherry).—J. Am. Pharm. Assoc. 1919, v. 8, p. 670.

BELLADONNÆ RADIX.

Mittelbach, Wm.: Belladonna root, containing a larger per cent of alkaloids than other parts of the plant, and being almost free from chlorophyll, should be the only part of the belladonna given official recognition.—Proc. Missouri Pharm. Assoc. 1919, p. 34.

Tsakalotos, A. E.: An investigation to determine if the alkaloids of belladonna root can be volatilized with steam in the presence of alcohol. Negative results were obtained.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 291-292.

Anon.: Two samples of belladonna root from India showed 0.41 and 0.40 per cent, respectively, of alkaloids by titration.—Evans' An. Notes, 1919, p. 27.

Éwe, G.: Seven samples of belladonna root examined conformed to the U. S. P. requirements.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

BENZALDEHYDUM.

Applebaum, A. I.: U. S. patent No. 1,302,273 describes the preparation of benzaldehyde by the oxidation of toluene.—Chem. Abstr. 1919, v. 13, p. 1862.

Macht, D. I.: A pharmacological study of benzaldehyde showed that this substance relaxes the tonus and inhibits the contractions of smooth muscle organs. It also possesses definite and marked anesthetic properties.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 508.

Roberts, J. G.: One sample of benzaldehyde examined was rejected because it gave a strong test for chlorinated products.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 83; J. Am. Pharm. Assoc. 1919, v. 8, p. 670.

BENZENE (NONOFFICIAL).

von Weinburg, A.: The benzene problem. It is believed that a satisfactory symbol for the atomic structure of benzene will never be attained as long as the fact that the atoms in the molecule are in constant motion is not taken into consideration.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 928–940.

Jones, W. J.: Experimental data are given to show that the fusing point and cryoscopic methods are superior to the chemical method for determining the purity of benzene.—J. Ind. & Eng. Chem. 1919, v. 11, p. 297–299.

Weiss, J. M.: Methods employed by the Barrett Company for the analysis of benzene and light oil are described in detail. Illustrated.—J. Ind. & Eng. Chem. 1918, v. 10, p. 1006–1012.

Jones, F. B.: A new method for the determination of small quantities of thiophene, toluene, carbon disulphide, and paraffin in commercial "pure" benzene is described.—J. Soc. Chem. Ind. 1918, v. 37, p. 324–327T.

Spielmann, Percy E., and Schotz, S. P.: A discussion of several different methods for the estimation of thiophene in benzene with suggestions for improvements in these methods.—J. Soc. Chem. Ind. 1919, v. 38, p. 188–190T.

Wray, Edward: Notes on the indophenine reaction for the detection of thiophene in benzene.—J. Soc. Chem. Ind. 1919, v. 38, p. 83–84T.

Weiskatten, H. G., and Steensland, H. S.: The action of benzene. V. The diaphasic leucopenia as a polynuclear amphophile phenomenon.—J. Med. Res. 1919, v. 39, p. 485–494.

BENZINUM PURIFICATUM.

Newton, J. F., and Williams, F. N.: Descriptions of physical tests for gasoline.—Petroleum Age, 1919, v. 6, No. 2, p. 41–44, through Chem. Abstr. 1919, v. 13, p. 659.

Colman, H. G., and Yoeman, E. W.: Notes on the determination of aromatic hydrocarbons in gasoline.—J. Soc. Chem. Ind. 1919, v. 38, p. 82–83T.

Herschel, Winslow H.: Experimental data obtained in the determination of the viscosity of gasoline with the Ubbelohde viscosimeter are presented.—Tech. Papers Bur. Stand. 1919, No. 125, p. 3–18.

Haden, Russell L.: Notes on benzine poisoning with a report on a chronic case.—Am. J. Pharm. 1919, v. 91, p. 801–807.

BENZOINUM.

Blokzeyl, K. R. F.: Notes on the different grades of benzoin exported from the Dutch East Indies and on tests for adulteration.—Drug & Chem. Markets, 1919, v. 5, No. 49, p. 9–10.

Kinke and Lieb: A study of the constitution and properties of siaresinol obtained from Siam benzoin.—Chem. Umschau, 1919, v. 26, p. 58.

Lieb and Zinke: Siam and Sumatra benzoin are different. The former is only partially soluble in dilute soda solution, the insoluble portion consisting of the sodium salt of siaresinol. The latter is completely soluble in cold dilute soda solution and consists of α sumaresinol.—Chem. Umschau, 1918, v. 25, p. 138; Pharm. Zentralh. 1919, v. 60, p. 391.

Suto, K.: The alcohol-soluble matter in 12 lots of benzoin examined ranged from 65.4 to 84.6 per cent. The U. S. P. requires 75 per cent.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 83; J. Am. Pharm. Assoc. 1919, v. 8, p. 670.

BENZOSULPHINIDUM.

Beyer, O.: Notes on methods for the determination of saccharin. A method is described for determining the amount of p-sulphoaminobenzoic acid present when the melting point of the sample of saccharin falls below 220° C.—Chem. Ztg. 1919, v. 43, p. 537–538; J. Soc. Chem. Ind. 1919, v. 38, p. 844A.

Richmond, H. D., and Hill, C. A.: Descriptions of methods for the examination of commercial samples of saccharin include the determination of moisture, tests for mineral matter, ammonia, carbonizable organic matter, sweetness, p-sulphonaminobenzoic acid, o-sulphonaminobenzoic acid, o-toluene-sulphonamide, lead, and arsenic.—J. Soc. Chem. Ind. 1919, v. 38, p. 8–10T.

Abraham, A.: Optical methods for the detection of dulcin and saccharin are described.—Mem. Acad. Roy. d. Sciences de Liége, v. X, p. 4, through J. Franklin Institute, 1919, v. 188, p. 429.

Beyer, O.: An investigation of the chemical changes in the composition of saccharin-bicarbonate tablets. The quantity of free saccharin diminished from 10.60 per cent to 0.77 per cent at the end of nine months.—Chem. Ztg. 1919, v. 43, p. 751–752.

Anon.: Analytical data relative to the testing of saccharin are presented.—Evans' An. Notes, 1919, p. 81–83.

Beyer, O.: A description of a rapid method for the identification of saccharin. The test depends on the fact that saccharin yields sodium sulphide upon fusion with metallic sodium. The sulphide is identified by the violet color which it yields with a solution of sodium nitroprusside.—Pharm. Ztg. 1919, v. 64, p. 717.

Anon.: A book review of a volume by Askar Beyer entitled *Ueber die Kontrolle und Herstellung von Saccharin. Praktischer Wegweiser für Chemiker, Zoll-Laboratorien, Apotheker, Drogisten, Phy-*

siologen, Arzte, Kaufleute usw.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 74.

Editorial: The Bureau of Chemistry, U. S. Department of Agriculture, has issued a statement to the effect that the use of saccharin in food is a menace to health and that it regards foods to which saccharin has been added as adulterated.—Bull. Pharm. 1919, v. 33, p. 487.

Barral and Rane: A paper discussing the present state of our knowledge concerning the relationship between chemical constitution and taste, with special reference to the production of a sweet taste. An abstract.—J. pharm. et chim. 1919, v. 19, p. 181–184.

BERBERIS, N. F.

Farwell, O. A.: The name *Mahoniae*, De Candolle should replace the name *Odostemon*, Rafinesque which occurs in the N. F. IV.—Drug. Circ. 1919, v. 63, p. 49.

Ewe, G.: One lot of *Berberis aquifolium* examined was rejected as it contained 50 per cent of rhizomes and roots without bark. The N. F. requires the rejection of berberis without bark.—J. Am. Pharm. Assoc. 1919, v. 8, p. 670.

BETAEUCAINÆ HYDROCHLORIDUM.

Mittelbach, Wm: Betaeucaine is used to such a slight extent that it should be deleted from the U. S. P.—Proc. Missouri Pharm. Assoc. 1919, p. 34.

BISMUTHI SUBNITRAS.

Wasicky, R.: Microchemical methods for the detection of copper in bismuth subnitrate are described.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 306.

uce, E.: A continuation of an article dealing with the determination of nitric acid in bismuth subnitrate.—Farm. Españ. 1919, v. 51, p. 70–73.

BISMUTHI SUBSALICYLAS.

Anon.: One hundred and twenty-eight samples of bismuth subsalicylate examined yielded from 40 to 73 per cent of bismuth oxide, 105 were within the Ph. Brit. limits of 62 to 65 per cent oxide and 0.1 per cent of free salicylic acid. Some of the samples rejected contained from 4 to 12 per cent of free acid.—Evans' An. Notes. 1919, p. 28.

BRAYERA, N. F.

Farwell, O. A.: The proper binomial for the botanical source of kousso is *Cusso abyssinica* (Gmelin) N. Comb.—Drug. Circ. 1919, v. 63, p. 49.

Anon.: A sample of cusso flowers examined yielded 18 per cent of ash.—Evans' An. Notes, 1919, p. 49.

BROMUM, N. F.

Guye, Ph. A.: A slight correction applied to the gas rules used by Moles and Reimann in the determination of the density of HBr gives the value, 79.920 for the atomic weight of bromine.—J. chim. phys. 1919, v. 17, p. 171–185.

Van Laar, J. J.: The determination of the atomic weight of bromine from the density in the normal gaseous state and the critical constants gave the value, 79.922.—J. chim. phys. 1919, v. 17, p. 266-324.

Denigès, G.: Bromoform has been identified as an impurity occurring in commercial bromine. The amount present does not exceed 2 to 3 per cent.—Répert. Pharm. 1919, v. 29, p. 350.

Werner, Franz F.: Notes on the behavior of certain metallic ferrocyanides toward bromine.—Ztschr. anal. Chem. 1919, v. 58, p. 23–24.

Sammartino, Ubaldo: Guinea pigs killed by exposure to bromine developed lesions of the esophagus and stomach as follows: ischemia, hypersecretion, dehydration, cellular necrosis, complete destruction.—Arch. farmacol. sper. 1918, v. 25, p. 300–320.

Baskerville, Charles: Certain war gases and health. Small amounts of bromine in the air are stated to completely prevent influenza.—Science, 1919, v. 50, p. 50.

BUCHU.

Anon.: Notes on the experimental cultivation of buchu in South Africa.—Bull. Imp. Inst. 1919, v. 17, p. 588–591.

Alsberg, Carl L., et al.: Attention is called to the appearance on the market of a nonofficial buchu, so-called "Oval" buchu (*Barosma crenulata* Hook. var. latifolia). Two other adulterants of buchu are mentioned, namely, *Empleurum serratulatum* Sol. and Ait., and *Barosma pulchellum* Bartl. and Wendl.—J. Am. Pharm. Assoc. 1919, v. 8, p. 466.

Hart, Fanchon: A microscopical method for the quantitative determination of vegetable adulterants in buchu is described and analytical data are given.—J. Am. Pharm. Assoc. 1919, v. 8, p. 1032–1034.

CACAO PRÆPARATA, N. F.

Knapp, Arthur W., and McClellan, Basil G.: A comprehensive review of the existing methods for the estimation of cacao shell in cacao products.—Analyst (The), London, 1919, v. 44, p. 2–22.

Hoepner, K.: If the crude fiber content exceeds 6 per cent, the iron oxide 0.1 per cent, and the acid-insoluble ash 0.5 per cent, all calculated on the dry, fat-free, and sugar-free substance, the cacao product under examination contains an excess of shell.—Ztschr. Unters. Nahr.- u. Genussm. 1919, v. 37, p. 18–31; J. Soc. Chem. Ind. 1919, v. 38, p. 435A.

Hughes, E. B.: An account of the determination of fat in cocoa and chocolate by the use of the centrifuge. The results obtained compare favorably with the Soxhlet method.—Chem. News, 1919, v. 119, p. 104.

CAFFEINA.

Power, Frederick B., and Chestnut, Victor K.: A chemical investigation of *Ilex vomitoria* Aiton. indicates that the drug may be a possible native source of caffeine.—J. Am. Chem. Soc. 1919, v. 41, p. 1307–1312.

Hommell, P. E.: The U. S. P. dose for caffeine is 2½ grains. Five grains could be given, yet the average physician does not prescribe more than one grain.—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

Stroup, Freeman P.: A chemical test to distinguish between caffeine and theobromine is based on the color changes produced by a reagent consisting of a solution of one part by weight of potassium dichromate in 20 parts of concentrated sulphuric acid.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 161–162; Am. J. Pharm. 1919, v. 21, p. 598–599.

Power, Frederick B., and Chestnut, Victor K.: An improved method for the quantitative determination of caffeine in vegetable material is described. The method is said to be a modification of that of Paul and Cownley for the determination of caffeine in tea. Analytical data in the analysis of tea, maté, coffee, and guarana are presented.—J. Am. Chem. Soc. 1919, v. 41, p. 1298–1306.

Tunmann, O.: Notes on the identification of caffeine in pharmaceutical preparations, blood and urine by the sublimation method.—Apoth.-Ztg. 1918, v. 33, Nos. 83 and 84, through Pharm. Zentralh. 1919, v. 60, p. 103–104.

Anon.: A method for the determination of caffeine in mixtures of antipyrine and caffeine is described. The method is based on the insolubility of caffeine picrate in chloroform.—Pharm. Ztg. 1918, p. 70, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 33.

Ferman: A method for the determination of caffeine in Antipyrinum Caffeino-Citricum.—Pharm. Ztg. 1918, p. 70, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 33.

Abelin, J.: New water-soluble caffeine and theophylline compounds. Caffeine and theophylline yield water-soluble compounds with benzoic, salicylic and acetylsalicylic acids. Soluble compounds are also formed with the alkali and alkali earth salts of the ωmethyl-sulphonic acids of carboxylic and heterocylic amines.—Apoth.-Ztg. 1919, v. 34, p. 316–317.

CAFFEINA CITRATA.

Anon.: In over 60 samples of citrated caffeine examined, the caffeine content ranged from 44 to 53.5 per cent, the citric acid content from 49 to 56 per cent.—Evans' An. Notes, 1919, p. 32.

CAFFEINÆ SODIO-BENZOAS.

Dall'Acqua, G.: Notes on the preparation of caffeine sodio-benzoate in the solid state and in the form of a solution.—Boll. chim.-farm. 1919, v. 24, p. 505–506.

Lyons, A. B.: In a discussion of the U. S. P. standard for caffeine sodio-benzoate, the author contends that a margin of variation of from 47.3 to 48 per cent of anhydrous caffeine is sufficient for all purposes and that the margin given in the U. S. P., 46 to 50 per cent, is too great.—Am. Druggist, 1919, v. 67, p. 32–37.

Anon.: One sample of caffeine sodio-benzoate examined was a mixture of caffeine and sodium benzoate. In other samples examined, the free acid present did not exceed 0.3 per cent and the caffeine content was generally about 44.5 per cent.—Evans' An. Notes, 1919, p. 32.

CAFFEINÆ SODIO-SALICYLAS, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for caffeine sodio-salicylate. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

Heffter, A.: An investigation of the stability of sterilized solutions of medicaments in ampoules. Solutions of caffeine sodio-salicylate did not deteriorate within ten months. Solutions of strophanthin maintained their activity unimpaired for a period of 13 months.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 142–146.

Anon.: In 27 samples of caffeine sodio-salicylate examined the caffeine content ranged from 41 to 44 per cent. In 1 sample the caffeine content was only 34 per cent.—Evans' An. Notes, 1919, p. 32.

CALAMINA PRÆPARATA, N. F.

Walker, T. L.: Mineralogy of the H. B. Mine, of Salmo, B. C. The report includes data obtained in the analysis of calamine.—Chem. Abstr. 1919, v. 13, p. 217.

Poitevin, Eugene: Notes on the crystallography of some Canadian minerals, including calamine.—Am. Mineral. 1919, v. 4, p. 22–25.

CALCII CARBONAS PRÆCIPITATUS.

Mittelbach, Wm.: It is suggested that precipitated calcium carbonate be deleted from the U. S. P., as prepared chalk is usually prescribed and can be used in all cases.—Proc. Missouri Pharm. Assoc. 1919, p. 35.

Rustung, G.: A sample of calcium carbonate examined contained magnesium and sulphate and was, therefore, unfit to be used for the preparation of solution of aluminum acetate.—Norges Apotek. Tidsskr. 1919, v. 27, p. 41–43, through Apoth.-Ztg., 1919, v. 34, p. 122.

Sollmann, Torald: Water-absorbing capacity of dusting powders. Calcium carbonate was found to absorb 65 per cent of its weight of water.—J. Am. M. Assoc. 1919, v. 72, p. 935–936.

CALCII CHLORIDUM.

Fishberg, Maurice: Notes on the use of calcium chloride as a palliative agent in the treatment of intestinal tuberculosis, with a report of cases.—J. Am. M. Assoc. 1919, v. 72, p. 1882–1884.

Knoll & Co., German patent No. 306,804 describes the preparation of compounds of urea and calcium chloride suitable for intravenous injection.—Chem. Abstr. 1919, v. 13, p. 636.

CALCII GLYCEROPHOSPHAS.

DuBois: Report of the subcommittee on glycerophosphates. It is recommended that the titration method for calcium glycerophosphates be given in the U. S. P., and that the addition of organic acids to increase solubility be discouraged. It is also recommended that the ash requirement of the U. S. P. be reduced to 58 per cent for the reason that it is impractical to manufacture a product yielding more than 58 to 59 per cent of ash.—Proc. Am. Drug. Mfg. Assoc. 1919, p. 276–283.

Harrisson, Joseph W. E.: An examination of a number of commercial samples of calcium glycerophosphate showed that there is a decline in quality of this product, in so far as the sulphate content is concerned. A minimum calcium sulphate content of 2.87 per cent to a maximum of 7.14 per cent was observed. The present U. S. P. test, which only responds in the presence of 3.1 per cent, or over, of calcium sulphate, should be made more stringent by lengthening the time period or requiring the addition of more of the salt to be tested.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 272–273.

Anon.: The solubility of calcium glycerophosphate in water is decreased by the addition of alcohol or glycerin. It is only about half as soluble in 12 per cent alcohol as in water. Lactic, citric, and phosphoric acids and sodium citrate increase its solubility but promote its decomposition.—Bull. Pharm. 1919, v. 33, p. 88.

CALCII HYPOPHOSPHIS.

Bayer: A method for the estimation of hypophosphites is based on the oxidation of the salt with potassium permanganate solution. The phosphoric acid formed is then determined by the addition of potassium iodide and the titration of the excess of iodine with sodium thiosulphate solution.—Pharm. Post, 1918, p. 355, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 35.

Anon.: Out of 57 samples of calcium hypophosphite examined, only 3 showed phosphites exceeding 3 per cent. Phosphites were usually present up to 2.5 per cent.—Evans' An. Notes, 1919, p. 34.

CALCII LACTAS.

Anon.: Three out of over 100 samples of calcium lactate tested assayed 98 to 100 per cent of anhydrous salt; 16 agreed with the formula containing $3H_2O$ and 53 with the formula containing $5H_2O$. Data showing the percentage of impurities present are given.—Evans' An. Notes, 1919, p. 34.

Graves, T. C.: A preliminary note on the use of calcium lactate in certain maniacal states.—Brit. M. J. 1919, v. 1, p. 406.

CALCII LACTOPHOSPHAS, N. F.

Anon.: One sample of calcium lactophosphate examined showed the presence of 66 per cent of anhydrous calcium lactate and 26 per cent of water. Another sample consisted of 71.3 per cent of calcium lactate and 28.7 per cent of calcium phosphate.—Evans' An. Notes, 1919, p. 34.

CALCII PHOSPHAS PRÆCIPITATUS, N. F.

Grünhut, L.: Analytical notes dealing with the analysis and constitution of calcium phosphate are presented.—Pharm. Zentralh. 1919, v. 60, p. 111–113.

CALCII SULPHIDUM CRUDUM.

Mittelbach, Wm.: The calcium sulphide on the market is as pure as can be obtained. The word "crude" should, therefore, be omitted from the U. S. P. title.—Proc. Missouri Pharm. Assoc. 1919, p. 35.

CALENDULA, N. F.

Gregory, Wm. M.: Notes on calendula officinalis as an antiseptic and germicide.—Ellingwood's Therap. 1919, v. 13, p. 124–126.

CALX.

Mittelbach, Wm.: The Latin title for lime in the U. S. P. should be changed from "Calx" to "Calcii Oxidum."—Proc. Missouri Pharm. Assoc. 1919, p. 35.

Meiklejohn, C. A.: A description of the method employed by the Rand Reduction Works for the determination of available CaO in lime.—J. Chem. Met. Soc. S. Africa, 1919, v. 19, p. 85–88, 201–202, 249–251, through Chem. Abstr. 1919, v. 13, p. 1195 and 2325.

Lenart, G.: Data are drawn up in the form of a new table for the determination of CaO in milk of lime by the specific gravity method.—Z. Ver. deutsch. Zuckerind. 1919, p. 1–15, through J. Soc. Chem. Ind. 1919, v. 38, p. 533A.

CALX CHLORINATA.

Mittelbach, Wm.: Chlorinated lime should be deleted from the U. S. P. because of its variable chlorine content and because chlorine can readily be obtained from other sources.—Proc. Missouri Pharm. Assoc. 1919, p. 35.

U. S. Tariff Commission: A descriptive summary dealing with the discovery, history, uses, domestic and foreign manufacturing conditions, etc., of chlorinated lime. Illustrated.—Tariff Information Catalogue, through Chem. Age, 1919, v. 1, No. 1, p. 28–32.

Justin-Mueller, Ed.: A discussion of the question, "Are the alkaline hypochlorites single salts or mixtures of salts?"—J. pharm. et chim. 1919, v. 20, p. 113–115.

Meldrum, Andrew M.: A report of experiments in the stabilization of bleaching powder.—J. Soc. Chem. Ind. 1919, v. 38, p. 80T.

Justin-Mueller, Ed.: A volumogasometric method for testing hypochlorites is based upon the reaction which takes place between hydrogen peroxide and the hypochlorite, e. g. $CaOCl_2+H_2O_2=CaCl_2+H_2O+O_2$.—Text. Mercury, 1919, v. 61, p. 107, through Chem. Abstr. 1919, v. 13, p. 2823.

Roberts, J. G.: One lot of chlorinated lime examined contained only 27.2 per cent available chlorine instead of not less than 30 per cent as required by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 87; J. Am. Pharm. Assoc. 1919, v. 8, p. 673.

Freiberger, M.: Results obtained in testing the bleaching properties of solution of bleaching powder containing free acid, free alkali, and those prepared with water of different degrees of purity.—Färber-Ztg. 1919, v. 30, p. 89–94, through Chem. Abstr. 1919, v. 13, p. 2603.

Fantus, B.: The preparation, analysis, and use of tablet triturates for the disinfection of drinking water are discussed.—J. Am. Pharm. Assoc. 1918, v. 7, p. 1034–1038.

Cohen, Barnett: The results of experiments indicate that bleaching powder may be effectively used in the disinfection of horse troughs as a harmless prophylactic measure in glanders-infected regions.—J. Infec. Dis. 1919, v. 24, p. 51–55.

Monziols, M.: Absolute disinfection of the hands can be accomplished in three minutes by the use of a paste containing bleaching powder.—Compt. rend. soc. biol. 1918, v. 81, p. 600–602.

CAMPHORA.

Andreau, R. L.: U. S. patent No. 1,313,661 describes the production of camphor by the oxidation of isoborneol with nitric acid by the use of accelerators selected from halogen compounds of a high degree of oxidation, e. g. $NOCl$, HIO_3, $FeCl_3$, chlorates or perchlorates.—Chem. Abstr. 1919, v. 13, p. 2683.

Anon.: Genuine crop shortage and control by a Japanese monopoly bureau are stated to be the causes for the scarcity of camphor in the United States.—Drug & Chem. Markets, 1919, v. 5, No. 55, p. 7–8.

Musso, L.: Experimental notes on the cultivation of camphor in Algiers.—Bull. sc. pharmacol. 1919, v. 26, p. 204–205.

Anon.: A review of an article by F. A. Gudger on the production of camphor in Florida.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 8–9.

Anon.: During 1917 China exported 473,000 pounds of camphor. Most of this came from the provinces of Kiangsi, Szechwan, and Yunnan.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 7.

Anon.: An account of developments in the camphor industry due to the war.—Drug & Chem. Markets, 1919, v. 5, p. 5.

Leo, H., and Rimbach, E.: The solubility of camphor in water at the ordinary temperature is 1 in 598. In Ringer's solution, it is 1 in 577. The solubility diminishes with rise in temperature.—Biochem. Ztschr. 1919, v. 95, p. 306–312.

Macht, David I.: The l-form of camphor was found by experiment to have a greater stimulating action on the isolated urethra than the d-form.—J. Pharmacol. & Exper. Therap. 1918, v. 12, p. 255–263.

Barnard, H. E.: Eight samples of camphor examined were found to be below the standard set by the U. S. P.—Bull. Indiana Bd. Health, 1919, v. 22, p. 53, 77.

CAMPHORA MONOBROMATA.

Anon.: The melting point of 40 samples of camphor monobromide varied between 75° and 77° C. Three samples were musty and had a camphor-like odor. One sample contained 45 per cent of boric acid.—Evans' An. Notes, 1919, p. 35.

Emery, W. O.: Studies in synthetic drug analysis. VII. A method for the estimation of monobromated camphor in migraine tablets depends on the fact that when an aqueous-alcoholic solution of the camphor derivative is subjected to the action of sodium amalgam the bromine is split off quantitatively in the form of its sodium salt, which may be determined gravimetrically in the usual way.—J. Ind. & Eng. Chem. 1919, v. 11, p. 756–757.

Curry, F. W.: A note on the use of monobromated camphor.—Ellingwood's Therap. 1919, v. 13, p. 310–311.

CANTHARIS.

Morgulis, S., and Muirhead, A. C.: Studies on the physiological action of cantharides. The polycythæmia produced in rabbits is not due to the activity of blood-forming tissue, but to condensation produced by loss of water through the kidneys.—Arch. Int. Med. 1919, v. 23, p. 190–196.

Kassner, G.: Examples from toxicological practice. The toxic action of cantharidin in dogs and cats is discussed.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 71–78.

Éwe, G.: Three samples of Chinese cantharides examined conformed with the U. S. P. requirements.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

CAPSICUM.

Houston, D. F.: The following is the standard for cayenne pepper given by the U. S. Department of Agriculture: "Cayenne pepper, Cayenne, is the dried, ripe fruit of *Capsicum frutescens* L., *Capsicum baccatum* L., or some other small-fruited species of *Capsicum*. It yields less than 15 per cent of nonvolatile ether extract, not more than 1.5 per cent of starch, not more than 28 per cent of crude fiber, not more than 7 per cent of total ash, nor more than 1 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No 136, p. 12.

Éwe, G.: Of four samples of capsicum examined, two were below standard.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

Nelson, E. K.: Researches on the chemical constitution of capsaicin, the pungent principle of capsicum. Capsaicin is a condensation product of vanillyl amine (3-hydroxy-4-methoxybenzylamine) and a decylenic acid.—J. Am. Chem. Soc. 1919, v. 41, p. 1115–1121.

Lapworth, A., and Royle, F. A.: A report of researches to determine the constitution of capsaicin, the pungent principle of capsicum. The authors express the view that capsaicin is possibly a derivative of dihydro-oxazole.—J. Chem. Soc. Lond. 1919, v. 115, p. 1109–1116.

Nelson, E. K.: A comparison of the degree of pungency of several vanillyl-acyl amides with capsaicin, the pungent principle of capsicum.—J. Am. Chem. Soc. 1919, v. 41, p. 2121–2130.

CARBO LIGNI.

Heuser, E., and Skioldebrand, C.: Data are given showing the yield of charcoal obtained on burning spruce wood, cotton cellulose.

wood cellulose, and lignin.—Ztschr. angew. Chem. 1919, v. 32, part 1, p. 41–45; J. Soc. Chem. Ind. 1919, v. 38, p. 215A.

Kolthoff, I. M.: Data obtained in the examination of adsorbents for the purpose of comparing their medicinal value are reported.—Pharm. Weekblad, 1919, v. 56, p. 207–225, 237–258.

Watson, H. E.: The absorptive power of charcoal increases with the temperature at which it is made, i. e., it increases as the quantity of volatile matter decreases.—J. Soc. Chem. Ind. 1919, v. 38, p. 99R.

Zerban, F. W.: A note on the use of the Hess-Ives tint-photometer for determining the decolorizing power of charcoal.—Louisiana Planter, 1918, v. 61, p. 282–283, through Chem. Abstr. 1919, v. 13, p. 198.

CARDAMOMI SEMEN.

Fox, Alvin: Notes on the production and use of cardamon and on the properties and use of its volatile oil.—Simmons' Spice Mill, New York, 1919, v. 42, p. 43.

Houston, D. F.: The following is the standard for cardamom seed given by the U. S. Department of Agriculture: "Cardamom is the dried seed of *Elettaria cardamomum*. It yields not more than 8 per cent of total ash, nor more than 3 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 12.

Anon.: Examination of importations of "cardamom seed" has shown in some instances the presence of considerable amounts of foreign material, consisting of small pebbles as well as the seeds of a species of *Amomum*, probably *Amomum xanthioides* Wallich or *Amomum villosum* Loureiro.—S. R. A. Chem. 1918, No. 23, p. 99.

CARUM.

Styger, Jos.: A report of a study of the anatomy of the fruits of different species of caraway.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 86, 94–95.

Houston, D. F.: The following is the standard for caraway given by the U. S. Department of Agriculture: "Caraway, caraway seed, is the dried fruit of *Carum carvi* L. It yields not more than 8 per cent of total ash, nor more than 1.5 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 12.

Alsberg, Carl L., et al.: Several shipments of caraway offered for importation contained a considerable number of fruits infected with a fungus-like growth resembling ergot.—J. Am. Pharm. Assoc. 1919, v. 8, p. 464.

CARYOPHYLLUS.

Houston, D. F.: The following is the standard for cloves given by the U. S. Department of Agriculture: "Cloves are the dried flower buds of *Caryophyllus aromaticus* L. They yield not more than 5 per cent of clove stems, not less than 15 per cent of volatile ether extract, not less than 12 per cent of quercitannic acid (calculated from the total oxygen absorbed by the aqueous extract), not more than 10 per cent of crude fiber, not more than 7 per cent of total ash, nor more than 0.5 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 13.

McGill, A.: The minimum value of 14 per cent volatile oil for genuine cloves is stated to be too low. The samples examined showed from 14.10 to 23.25 per cent. Adulteration of ground cloves with pimento is frequent. Of 122 samples of ground cloves examined, 57 showed less than 14 per cent volatile oil, and 40 of them contained pimento.—Bull. Lab. Dept. Trade & Commerce, Ottawa, Canada, 1919, No. 427.

Zimmermann, Walther: A sample of cloves examined was found to contain 8 per cent of stems, pieces of leaves, clover blossoms, and gravel.—Apoth. Ztg. 1919, v. 34, p. 13.

CASCARA SAGRADA.

Mittelbach, Wm.: The English and Latin titles of "Cascara Sagrada" should be changed to "Rhamnus" and the present titles be given as synonyms.—Proc. Missouri Pharm. Assoc. 1919, p. 33.

Anon.: A detailed description of a method for the quantitative determination of hydroxymethyl anthraquinone in senna, rhubarb, and cascara.—J. pharm. Belg. 1919, v. 1, p. 200; Pharm. J. Lond. 1919, v. 102, p. 250.

CASTANEA, N. F.

Hommell, P. E.: The National Formulary should direct that chestnut leaves be preserved in tightly closed containers protected from the light.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

Éwe, G.: Of two lots of chestnut leaves examined, one was rejected because it was hard and brittle, and brown in color; the other lot contained leaves of *Castanea* species other than that prescribed by N. F.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 84; J. Am. Pharm. Assoc. 1919, v. 8, p. 671.

CAULOPHYLLUM, N. F.

Anon.: The Department of Agriculture reports that a sample of powdered blue cohosh examined yielded 15.73 per cent ash, whereas the National Formulary provides that it shall not yield more than 6 per cent.—S. R. A. Chem. Suppl. 1919, No. 61, p. 20.

CERA FLAVA.

Buchner, Georg: Contributions to the chemistry of the waxes, including beeswax, candelilla wax and carnauba wax.—Bayr. Ind.

Schoenfeld, F., and Krumhaar, H.: A report of a study to determine the mechanism of the action of mineral acids and their salts in the preparation of flocculent and powdery forms of yeast.—Wchnschr. Brau. 1918, v. 35, p. 302–304, 342–343, through J. Soc. Chem. Ind. 1919, v. 38, p. 299A.

Bohorny, Th.: Data relative to the enzymatic power of yeast are given. By the addition of formaldehyde, a yeast can be produced that inverts, but does not ferment sugar.—Allg. Brauer v. Hopfenztg. 1918, v. 58, p. 1093–1094, through Chem. Zentralbl. 1919, v. 1, p. 96–97.

Janke, A.: In the valuation of pressed yeast by the baking test, 120 minutes should be taken as the maximum permissible time of fermentation and the test should be made not later than 96 hours after the yeast is discharged from the factory. Staining with methylene blue solution is suitable for estimating the physiological condition of the yeast cell or for judging its keeping properties.—Ztschr. landw. Vers. Wesen. Oesterr. 1917, v. 20, p. 12–33; Chem. Zentralbl. 1919, v. 90, p. 15–16; J. Soc. Chem. Ind. 1919, v. 38, p. 229A.

Vautier, E.: Comments on some procedures for the analysis of yeast.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 658–660.

Meisenheimer, Jakob: An investigation of the nature of the monoamino acids present in the products of autolysis derived from bottom and top fermented yeasts.—Ztschr. physiol. Chem. 1919, v. 104, p. 229–283.

Hawk, P. B., et al.: From experiments, it is concluded that baker's yeast can replace from 9 to 29 per cent of the protein in the diet of man without detriment to the best nutritive interest of the individual.—Am. J. Physiol. 1919, v. 48, p. 199–210, 211–220.

Schweizer, K.: Notes on the utilization of yeast in which reference is made to its use in medicine.—Schweiz. Chem. Ztg. 1919, v. 1, p. 33–36, 69–72, through J. Soc. Chem. Ind. 1919, v. 38, p. 433–434A.

Wolf, Elizabeth P., and Lewis, Julian H.: The results of experiments indicate that the feeding of yeast has no stimulating effect on the production of antibodies to sheep blood in rabbits. There is no evidence of any effect on the gastrointestinal tract of rabbits which would explain its curative properties.—J. Infec. Dis. 1919, v. 25, p. 311–314.

Kanematsu, Sugiura, and Benedict, Stanley R.: Growth-promoting factors in yeast may be partially inactivated by exposure to radium emanation.—J. Biol. Chem. 1919, v. 39, p. 431–433.

CERII OXALAS.

Hommell, P. E.: There is no good reason for cerium oxalate being in the U. S. P., as, according to our best medical authorities, the therapeutic value of this usually impure salt is inferior to that of bismuth salts.—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

CETACEUM.

Marsek, F. A.: In an article on cosmetic preparations, the physical and chemical properties of spermaceti are considered.—Am. Perf. 1919, v. 14, No. 1, p. 7.

Axelrad, S., and Hochstadter, I.: U. S. patent No. 1,290,870 describes a method for the preparation of cetyl alcohol from spermaceti.—Chem. Abstr. 1919, v. 13, p. 914.

CHIMAPHILA, N. F.

Anon.: The Bureau of Chemistry reports that a sample of pipsissewa examined contained approximately 48 per cent of stems, whereas the N. F. provides that it should not contain more than 5 per cent of stems or other foreign matter.—S. R. A. Chem. Suppl. 1919, No. 59, p. 486.

Éwe, George E.: Two lots of pipsissewa examined contained 38 and 50 per cent, respectively, of stems and fruits, whereas only the leaves are desired. A third lot was largely stems. The N. F. limits stems and fruits to not more than 5 per cent. One lot was *Chimaphila maculata*, while the N. F. specifies *Chimaphila umbellata*.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 89; J. Am. Pharm. Assoc. 1919, v. 8, p. 755.

CHIRATA, N. F.

Cofman, Victor: A note on Japanese chirata, *Swertia chinensis* Franchet (*Ophelia diluta*, Ledebour). The plant seems to be superior to the official Indian chirata.—Pharm. J. Lond. 1919, v. 103, p. 82; Year-Book Pharm. & Trans. 1919, p. 418–420.

CHLORALUM HYDRATUM.

Zimmermann, Walther: A report of the analysis of a sample of chloral hydrate.—Apoth.-Ztg. 1919, v. 34, p. 13.

Éwe, George E.: A description of a method for the determination of chloral hydrate in complex mixtures, such as tablets containing chloral hydrate, potassium bromide, cannabis, extract of hyoscyamus, zinc bromide, starch, talcum, etc.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 178.

Gettler, Alexander O.: A method for the detection of chloral in the presence of chloroform and formalin in embalming fluids is described.—Proc. Soc. Exper. Biol. & Med. 1919, v. 16, p. 110–116.

Anon.: Notes on the future of the cinchona trade in Burma.—Pharm. J. 1919, v. 102, p. 63.

Anon.: Statistics showing the production of cinchona in India for the period from 1887 to date are given.—Chem. & Drug. 1919, v. 91, No. 3, p. 45–46.

Anselmino, O.: Data relative to the ash content of powdered cinchona bark of different degrees of fineness are presented. The ash content of the whole bark is given as 2.4 per cent.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 121.

Schaefer, Hugo H.: Analytical data showing the variation in the alkaloidal content of cinchona bark and its preparations are presented. The requirements of the U. S. P. IX are stated to be lower than those of the U. S. P. VIII, since the latter considers only the total alkaloids while the former considers only the ether-soluble alkaloids. In the opinion of the author, both requirements are desirable, as the assay for the ether-soluble alkaloids serves as a good check on the quinine content.—J. Am. Pharm. Assoc. 1919, v. 8, p. 11–13.

Oddo, Bernardo: A report of experiments on the assay of cinchona extract and fluidextract.—Ann. chim. applicata, 1919, v. 12, p. 79–89.

Roberts, J. G.: An average sample of yellow cinchona from a forty-bale lot examined assayed 6.05 per cent alkaloids.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 84; J. Am. Pharm. Assoc. 1919, v. 8, p. 671.

Éwe, G.: Five lots of cinchona bark from Ecuador assayed 0.36 per cent, 0.68 per cent, 2.22 per cent, 2.56 per cent, and 5.32 per cent total alkaloids, respectively. Two lots from Peru assayed 2.80 per cent and 3.82 per cent total alkaloids.—J. Am. Pharm. Assoc. 1919, v. 8, p. 671.

Éwe, G.: Of 12 samples of yellow cinchona examined, 3 were below standard.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

McElhenie, Thomas D.: It is suggested that 1 per cent by volume of hydrochloric acid be added to the menstruum in the manufacture of cinchona preparations.—Proc. New York Pharm. Assoc. 1919, p. 54.

Heidelberger, Michael, and Jacobs, Walter A.: Syntheses in the cinchona series. I. Syntheses of the simple cinchona alkaloids and their derivatives. II. Quaternary salts—J. Am. Chem. Soc. 1919, v. 41, p. 817–833, 2090–2120.

Giemsa, G., and Halberkann, J.: Cinchona alkaloids. II. A report of researches on azo-5 and amino-5-compounds of cupreine, hydrocupreine and their methyl and ethyl ethers.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 906–923.

Léger, E.: A report of researches on the oxydihydrocinchonines (α and β) and their rôle in the production of certain isomers of cinchonine.—Compt. rend. acad. sc. 1919, v. 168, p. 404–407.

Rabe, Paul, and Kindler, Karl: Researches on the constitution of the cinchona alkaloids. XXI. Synthesis of dihydroquinicine and of β-γ-piperidylpropionic acid.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 1842–1850.

CINCHONA RUBRA.

Partridge, W.: The B. P. method for the determination of total alkaloids in red cinchona bark consists in mixing 6 grams of calcium hydroxide with 10 grams of the powdered bark and 22 cubic centimeters of water and extracting the paste with "benzolated amyl alcohol." The author obtains better results by reducing the amount of water to 12 cubic centimeters.—Analyst (The), London, 1919, v. 44, p. 96.

Éwe, G.: of 2 samples of red cinchona examined, 1 was below standard.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

CINCHONIDINÆ SULPHAS.

Léger, E.: A contribution to the study of the chemical constitution of cinchonidine.—Compt. rend. acad. sc. 1919, v. 169, p. 67–70.

CINCHONINÆ SULPHAS.

Hommell, P. E.: Sulphate of cinchonine should be deleted from the U. S. P., as it is absolutely unreliable so far as antimalarial properties are concerned. Where quinine is contra-indicated on account of disturbance to the nervous system, sulphate of cinchonidine should be exhibited.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

Léger, E.: A study of α- and β-hydroxydihydrocinchonine with reference to their rôle in the production of certain isomers of cinchonine.—Compt. rend. acad. sc. 1919, v. 168, p. 404–407.

CINNAMOMUM SAIGONICUM.

Houston, D. F.: The following is the standard for Saigon cinnamon given by the U. S. Department of Agriculture: "Saigon cinnamon, cassia, is the dried bark of cultivated varieties of *Cinnamomum cassia* (Nees) Blume."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 12.

Anon.: An investigation of the value of cinnamon bark from the Gold Coast. Distillation trials with several samples of bark are reported. All samples were found to be far above the requirements of the Brit. Ph.—Bull. Imp. Inst. 1919, v. 16, p. 146, and v. 17, p. 189–191.

Kubota, Seiko, and Macht, David I.: A study of the action of cocaine hydrochloride, novocaine nitrate, alypin, stovaine, betaeucaine, holocaine hydrochloride, phenylmethylol, allocaine-S, and apothesin on excised skeletal muscle of the frog and rat.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 31–44.

Valenti, A.: A study of the hydrochlorides of nevralteine and its methyl derivative. These compounds are equally as effective as other local anesthetics for the production of local anesthesia, and are only slightly toxic, even when injected hypodermatically.—Arch. farm. sper. 1918, v. 25, through Arch. ital. biol. 1919, v. 69, p. 97–118.

Kubota, Seiko: A study of the pharmacological action of allocaine-S, a new local anesthetic. Its use is found to be limited on account of its irritating properties and because of its precipitation by tissue fluids.—J. Pharmacol. & Exper. Therap. 1919, v. 12, p. 361–376.

Anon.: Methods for the preparation of benzyl alcohol are described. It is stated that the use of this alcohol in 50 cases has demonstrated the efficiency of a 1 per cent aqueous solution as a local anesthetic.—Chem. & Drug. Australas. 1919, v. 34, p. 15.

Sollmann, T.: Benzyl alcohol is demonstrated to have about the same anesthetic value as alypin and betaeucaine when applied to mucous membranes. Its action is not so lasting as that of cocaine.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 355–360.

Voegtlin, Carl, and Livingston, A. E.: An experimental study of the value of benzyl alcohol as a spinal anesthetic indicates that its action is similar to that of the members of the cocaine series.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 513–514.

Anon.: A monograph on benzyl alcohol, including tests for purity.—Rep. Chem. Lab. Am. M. Assoc. 1918, v. 11, p. 59–61.

Clark, A. H.: A discussion of standards for benzyl benzoate. Analytical data obtained in the examination of two commercial specimens are given.—Rep. Chem. Lab. Am. M. Assoc. 1919, v. 12, p. 84–87.

Macht, David I.: A therapeutic, pharmacologic, and clinical study of benzyl benzoate.—J. Am. M. Assoc. 1919, v. 73, p. 599–603.

Macht, D. I.: A report of further experiences with benzyl benzoate and benzyl alcohol. Benzyl benzoate has been found useful in spasmodic dysmenorrhea, spastic conditions of the intestines and stomach, threatened abortion, renal and biliary colic. The local anesthetic action of benzyl alcohol has been found useful in infiltration anesthesia and in genito-urinary work.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 509.

Hjort, Axel M., and Eagen, Joseph T.: Pharmacological investigation has shown that benzylcarbinol (rose oil) possesses local anesthetic properties similar to benzyl alcohol. It is more stable than the latter, is no more toxic, and is sufficiently soluble in water to permit of its use in aqueous solution.—J. Pharm. & Exper. Therap. 1919, v. 14, p. 211–219.

Anon.: Data obtained in the analysis of the market supply of procaine are presented. Methods for its standardization are described.—Rep. Chem. Lab. Am. M. Assoc. 1918, v. 11, p. 48–53.

Sollmann, T.: Some market specimens of procaine examined gave a rose color with nitric acid. Authentic samples do not answer to this test. It is concluded that the development of the rose color is due to an unidentified impurity.—J. Am. Pharm. Assoc. 1919, v. 8, p. 458–459.

Eliphinstone, J. H.: Novocaine-adrenaline stock solutions can be preserved by saturating the atmosphere above them with chloroform containing a trace of hydrochloric acid.—Dental Cosmos, 1919, v. 61, p. 675.

Meyer, Arthur W.: Notes on symptoms of intoxication following the use of novocaine for the production of local anaesthesia.—Deutsch. med. Wchnschr. 1919, v. 45, p. 681–682.

COCCUS.

Hommell, P. E.: The dose of cochineal is not given in the U. S. P., yet it is employed as a therapeutic agent.—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

Anon.: In 86 samples of cochineal examined, the ash ranged from 3.2 to 6 per cent. In 10 other samples of inferior quality, the ash varied between 7 and 15 per cent.—Evans' An. Notes, 1919, p. 41.

CODEINÆ PHOSPHAS.

L. V.: A note calls attention to the fact that codeine is precipitated from solution by sodium and potassium iodide and by potassium bromide. If the solutions are very weak precipitation does not occur.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 65–66.

COFFEA TOSTA, N. F.

Houston, D. F.: The following is the standard for coffee given by the U. S. Department of Agriculture: "Coffee is the seed of *Coffea arabica* L. or *Coffea liberica* Bull., freed from all but a small portion of its spermoderm, and conforms in variety and place of production to the name it bears."

"Roasted coffee is coffee which by the action of heat has become brown and developed its characteristic aroma and contains not less than 10 per cent of fat and not less than 3 per cent of ash."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 18.

Trigg, Charles W.: Coffee roasting. The production of color, flavor, and aroma in coffee roasting is due to a combination of de-

Houston, D. F.: The following is the standard for coriander seed given by the U. S. Department of Agriculture: "Coriander seed is the dried fruit of *Coriandrum sativum* L. It contains not more than 7 per cent of total ash, nor more than 1.5 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 13.

Anon.: The Bureau of Chemistry calls attention to the fact that in some instances, importations of "coriander seed" have consisted of fruits of the "Bombay" or "Indian" coriander and not infrequently yield less volatile oil than the pharmacopœial article.—S. R. A. Chem. 1918, No. 23, p. 98.

COTARNINÆ HYDROCHLORIDUM.

Anon.: The melting point of a sample of cotarnine hydrochloride examined was found to be 184° C., and that of the free base 140°. The solubility and appearance were very good.—Evans' An. Notes, 1919, p. 46.

Hanzlik, Paul J.: In an investigation of the effects of various agents on superficial hemorrhage and the efficiency of local hemostatics, it was found that cotarnine salts increase bleeding on local application.—J. Pharmacol. & Exper. Therap. 1918, v. 12, p. 71–117.

COUMARINUM, N. F.

DeJong, A. W. K.: A study of the action of solar light on coumarin. It is concluded that the product formed is not hydro-coumarin.—Proc. Acad. Sci. Amsterdam, 1918, v. 20, p. 875–876, through Chem. Abstr. 1919, v. 13, p. 1460.

Anon.: A method for the detection of acetanilid, when used to adulterate coumarin, is described, also a quantitative method for the determination of coumarin.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 148.

Anon.: A note on the adulteration of coumarin. The method devised by Obermeyer was used for the quantitative estimation of coumarin.—La Parfumerie moderne, v. 12, Feb. 24, through Chem. Zentralbl. 1919, v. 4, p. 113.

CREOSOTI CARBONAS.

Anon.: The specific gravity of 40 samples of creosote carbonate examined varied between 1.1413 and 1.1696. Only 5 of these agreed with the B. P. C. requirement of 1.165.—Evan's An. Notes, 1919. p. 49.

CREOSOTUM.

Scholar, Abel: According to the Ph. Brit., creosote is composed of guaiacol and cresol. Should not this be creosol, $C_8H_{10}O_2$, which was formerly named creasol? Is not cresol identical with cresylic acid, a homologue of phenol with the formula, C_7H_7OH?—Chem. & Drug. 1919, v. 91, No. 33, p. 71.

Roberts, J. G.: One lot of creosote examined complied with all the U. S. P. tests, except the test for the detection of coal-tar creosote.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 85.

Keenan, F. J.: Three of 5 lots of creosote examined contained coerulignol.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 85.

Terry, Robert W.: Notes on the preparation of calcium creosotate.—Midl. Drug. 1919, v. 43, p. 132.

CRESOL.

Dawson, H. M.: The estimation of mixtures of isomers and other closely related substances. Curves showing the freezing points of mixtures of phenol and the three cresols are presented and discussed.—J. Soc. Dyers Colourists, 1919, v. 35, p. 123-128, through Chem. Abstr. 1919, v. 13, p. 2167.

Ditthorn, Fritz: An investigation of the comparative values of the three cresols (meta-, ortho- and para) as disinfectants. A mixture of the three cresols is found to be more efficient than any one of the individuals.—Centralbl. f. Bakteriol. (Orig.), 1919, v. 82, p. 483–491.

CRETA PRÆPARATA.

Sollman, Torald: Prepared chalk, used as a dusting powder, is found to absorb 53 per cent of its weight of water.—J. Am. M. Assoc. 1919, v. 72, p. 935–936.

CROCUS, N. F.

Anon.: A review of a volume by Rudolf Kuráz entitled *Der Safran und seine Kultur.*—Pharm. Zentralh. 1919, v. 60, p. 357.

Kuráz: The cultivation of saffron is discussed.—Ztschr. allgem. österr. Apoth.-Ver. 1918, No. 48 and 49, through Pharm. Ztg. 1919, v. 64, p. 83.

Houston, D. F.: The following is the standard for saffron given by the U. S. Department of Agriculture: "Saffron is the dried stigma of *Crocus sativus* L. It yields not more than 10 per cent of yellow styles and other foreign matter, not more than 14 per cent of volatile matter when dried at 100° C., not more than 6 per cent of total ash, nor more than 1 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 14–15.

Niederstadt: A short botanical note on saffron and its adulteration with feminelle, *Calendula officinalis* and safflower. Certain chemicals used as adulterants are also mentioned.—Prometheus, 1918, v. 29, p. 441–442, through Chem. Zentralbl. 1919, v. 2, p. 624.

Wohlgemuth, J.: A critical discussion of some of the new theories of the formation and action of diastase. The work of Biedermann and Woker could not be confirmed.—Biochem. Ztschr. 1919, v. 94, p. 213–224.

Maggi, H.: A discussion of the relationship between diastase, peroxidase and catalase. Diastase may be considered a complex radical combined with an aldehyde group.—Helvetica chim. acta, 1918, v. 1, p. 433–451.

Kita, G.: An investigation of the influence of calcium salts on the starch-liquefying enzyme of *Aspergillus oryzae*. At ordinary temperatures calcium salts retard liquefaction and saccharification, in the case of malt diastase, but accelerate it at 50° C. An abstract.—J. Soc. Chem. Ind. 1919, v. 38, p. 508A.

Suto, K.: One lot of diastase examined assayed very much less than the 1.50 required by the U. S. P. This lot readily converted starch paste to the "thin" stage, but not to the stage of complete conversion.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 85; J. Am. Pharm. Assoc. 1919, v. 8, p. 671.

DIGITALIS.

Riegel, Louis: Historical notes on digitalis and its use in the practice of medicine.—D.-A. Apoth.-Ztg. 1919, v. 40, p. 116.

Koch, George P., and Butler, J. Russell: Experiments are described in the germination of *Digitalis purpurea* seeds, and the results of fertilizer tests are presented.—Am. J. Pharm. 1919, v. 91, p. 211–219.

de Graaff, W. C.: The cultivation of digitalis in Holland.—Pharm. Weekblad, 1919, v. 56, p. 1107–1109.

Straub, W.: A report of studies on digitalis culture. The systematic investigation of one-year plants disclosed the fallacy of requiring that only two-year plants be harvested. A comparative study of the activity of the herb leaves and leaf tissues shows that the stem and skeletal parts affect the quality of the drug unfavorably.—Arch. Pharm. 1918, v. 256, p. 196–200.

Gronberg, J.: From experience it is concluded that digitalis can be grown in Finland with success and that products prepared therefrom are as good as those made in Germany.—Finska Lak. Handlinger, 1919, v. 71, p. 704–717, through Physiol. Abstr. 1919, v. 4, p. 462.

Youngken, Heber W.: Botanical and histological descriptions of *Digitalis siberica.* Illustrated.—J. Am. Pharm. Assoc. 1919, v. 8, p. 923–928.

Blaringhem, L.: A study of the hybrids of *Digitalis purpurea* L. and *Digitalis lutea* L.—Compt. rend. acad. sc. 1919, v. 169, p. 481–483.

Guérin, P.: The histological differences between the leaves of *Digitalis purpurea* and *D. thapsi* are described and the characteristic glandular hairs of the latter are figured.—L'Union pharm. 1919, v. 60, p. 161.

Alsberg, Carl L., et al.: In a number of instances *Digitalis thapsi* L. has been offered for *Digitalis purpurea* L. This substitute grows wild in Spain.—J. Am. Pharm. Assoc. 1919, v. 8, p. 470.

Pratt, J. H., and Morrison, Hyman: The activity of American digitalis as revealed by the one-hour frog method is reported on. The best American digitalis, both wild and cultivated, is equal in activity to the best European digitalis. Specimens of high potency have been obtained from Virginia, Nebraska, Wisconsin, Minnesota, Oregon, and Washington. The majority of samples of American digitalis examined were of low potency.—J. Am. M. Assoc. 1919, v. 73, p. 1606–1611.

Hommell, P. E.: The U. S. P. should direct that digitalis leaves be preserved in tightly closed containers protected from the light.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

O'Brien, J. F., and Snyder, J. P.: Data showing the rate of deterioration of high-test American-grown digitalis as revealed by the guinea pig, cat, and frog methods are presented.—J. Am. Pharm. Assoc. 1919, v. 8, p. 914–919.

Newcomb, E. L.: A report of an investigation dealing with the relation of season to the therapeutic value of digitalis. Analytical data obtained in the physiological assay of samples collected during different seasons of the year are presented.—Proc. Minnesota Pharm. Assoc. 1919, p. 177–181.

Hamilton, Herbert C.: A study of the effect of drying temperatures on the physiologic activity of digitalis leaves. It is concluded that oven drying has no advantages over air drying.—J. Am. Chem. Soc. 1919, v. 41, p. 125–129.

Pittenger, P. S.: Results obtained in the physiological assay of tinctures of digitalis prepared from the leaves and petioles, respectively, show that there is but little difference in the activity of these two parts of the plant.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 175.

Kiliani and Kraft: Some experimental data relative to the chemistry of digitalis leaves are presented. Data showing the composition of certain proprietary preparations of digitalis are also given.—Pharm. Zentralh. 1919, v. 60, p. 101–102.

Sluyters: An investigation of the statement of Heffter that more active principles are obtained from digitalis by extraction with absolute alcohol in a Soxhlet extractor than by Straub's method of fractional percolation with cold water and 50 per cent alcohol. The results showed that Heffter's method yields a greater portion of substances possessing a lethal action on the frog than is the case with Straub's process, which, however, yields a larger amount of the principles having a specific action on the heart.—Berl. klin. Wchnschr. 1919, v. 34, through Chem. & Drug. Lond. 1919, v. 91, No. 52, p. 74.

Mannich, C.: From a study of the absorption of digitalis glucosides, it is concluded that the readiness with which the glucosides are adsorbed by the powdered drug explains the difficulty of their complete extraction and also the better results which are obtained when alcohol is used to replace water as the extracting solvent.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 206–213.

Dooley, M. S.: From a brief survey of the literature it is concluded that preparations of digitalis, for various reasons, show great variation in potency, a condition which calls for routine assaying, and that fat-free preparations seem to possess no superior qualities to those of the U. S. P. and to deteriorate more rapidly.—Midl. Drug. 1919, v. 53, p. 5–7.

Schmidt, James M., and Heyl, Frederick W.: An investigation of the stability of digitalis-leaf extracts has revealed the fact that they gradually lose part of their activity. The rate and degree of deterioration differs in extracts prepared from young leaves and mature leaves. A number of conclusions are drawn.—Am. J. Pharm. 1919, v. 91, p. 425–437.

Tschirch, A., and Wolter, F.: A report of experiments on the chemical evaluation of digitalis. All the known chemical methods were compared with the so-called physiological method, but no definite relationship could be traced. It is concluded that substances are present which are in themselves inactive, but which are nevertheless capable of influencing the action of the drug.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 469–474, 495–498, 512–514.

Blomberg, J.: The gitalin reaction furnishes a better criterion of the value of digitalis preparations than the usual physiological tests. This reaction consists in evaporating a chloroform solution of the preparation, taking up the residue with glacial acetic acid and ferric sulphate and adding sulphuric acid. The colored ring formed varies in intensity with the concentration of the gitalin.—Pharm. Weekblad, 1919, v. 56, p. 790.

Hatcher, Robert A.: A preliminary paper in which it is pointed out that digitalis should be assayed with reference to its content of chloroform-soluble material, chloroform dissolving the constituents of clinical importance.—J. Am. Pharm. Assoc. 1919, v. 8, p. 913–914.

Focke, C.: A discusison of the physiological standardization of digitalis with reference to the advisability of making this a requirement of the Ph. Germ. An extensive bibliography is appended.—Arch. Pharm. 1919, v. 257, p. 270–288.

Lewisson, Gertrud: A report of studies on the evaluation of heart remedies by introduction into the intestines instead of the lymph sac or musculature as commonly practiced. Data showing the results obtained are presented in the form of tables.—Ztschr. exper. Path. u. Therap. 1919, v. 20, p. 275–384.

Joachimoglu, G.: Data relative to the physiological assay of strophanthus and digitalis tinctures of different origin are given.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 170–199; J. Soc. Chem. Ind. 1919, v. 38, p. 387A.

Rowe, L. W.: For comparison, specimens of preparations of squill, digitalis, strophanthus, and ouabain were assayed by the frog, the cat, and the dog method. The results indicated that the frog method is the most accurate.—J. Am. Pharm. Assoc. 1919, v. 8, p. 900–912.

Grönberg, John: A study of the influence of abnormal weather conditions on the reaction of heart stimulants on frogs. The action of digitalis and *Erythrophleium hydrochloricum* on frog hearts varied greatly when compared with normal weather conditions. Foche's method was employed.—Svensk farm. Tidskr. 1919, v. 23, p. 545–552.

Okamoto, S.: In the physiological testing of digitalis the best results are obtained by the use of that portion of the dog uterus which lies nearest to the horns.—Japanese Med. Lit. 1919, v. 4, p. 20.

Berry, Edgar: A description of a new chemical physiological method for standardizing digitalis preparations. The method includes the colorimetric determination of the water-soluble glucosides and total glucosides separately and also the determination of the minimum dose of the preparation. A formula is given for determining the ratio of the toxic value to the therapeutic value.—Chem. & Drug. 1919, v. 91, No. 30, p. 95–96; Pharm. J. Lond. 1919, v. 103, p. 69–71; Year-Book Pharm. & Trans. 1919, p. 393–402.

Kiliani, H.: The author has succeeded in degrading a compound of the digitalis series, digitogenic acid, to simpler substances, a lactone and a monobasic acid.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 200–205.

Kiliani, H.: A study of some neutral and acid substances obtained by the oxidation or reduction of digitogenic acid, gitogenic acid, digitoxigenin, and digitaligenin.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 1613–1639, through J. Soc. Chem. Ind. 1919, v. 38, p. 54A.

Santesson, C. G., and Strindberg, L.: Experiments with rabbits have shown that the exciting and inhibiting effects of gitalin are due to a direct action on the nerve centers.—Skandinavisches Archiv für Physiologie, 1917, v. 35, p. 51–100, through J. physiol. et path. gén. 1919, v. 18, p. 153.

Straub, W., and Krehl, L.: Gitalin is recommended as an efficient digitalis derivative.—Deutsch. med. Wchnschr. 1919, v. 45, p. 281–283.

Sakai, S., and Schimidzu, S.: An electrocardiographic investigation of the action of bufagin, a crystalline principle from the venom of the toad, and a comparison with that of digitalis. No essential difference in action was found between bufagin and the glucosides of digitalis.—Japanese Med. Lit. 1918, v. 3, p. 76.

Rogers, T. B.: Notes on the dosage and therapeutic action of digitalis, strophanthus, squill, and some of their preparations.—Mulford Vet. Bull. 1919, v. 9, p. 26–29.

Hatcher, R. A., and Eggleston, C.: An extensive study of the elimination of amorphous strophanthin, digitoxin, and digitalin in the rat and of ouabain in the cat and dog. The relative toxicity of the different substances administered in various ways was obtained, also the relative amounts excreted by the kidney and liver were determined, and many other facts are brought out.—J. Pharmacol. & Exper. Therap. 1919, v. 12, p. 405–496.

Weil, Alfred: The central action claimed for digitalis by Pongs is denied.—Deutsch. Arch. klin. med. 1918, v. 125, p. 227–231.

Walter, Margarete: Investigations on the pharmacology of digitalis-like compounds. No connection could be found between diffusibility, ability to be absorbed, electrical migration and reversibility of the effect on the frog's heart.—Biochem. Ztschr. 1918, v. 92, p. 267–281.

von Iseekutz, B.: Pharmacologic studies of the reversibility of the digitalis action.—Ztschr. exper. Path. u. Therap. 1919, v. 20, p. 445–459.

Paranjké, A.: A study of the rate of absorption of various digitalis preparations from the lymph sac of the frog.—Arch. exper. Path. u. Pharmakol. 1919, v. 85, p. 109–122.

Williams, Wm. R.: A discussion of digitalis, with special reference to the methods of administration.—Hahnemann. Month. 1919, v. 54, p. 687–693.

Pardee, Harold E. B.: A discussion of digitalis medication from the standpoint of dosage and rate of elimination from the body.—J. Am. M. Assoc. 1919, v. 73, p. 1822–1824.

Krehl, L.: Digitalis should not be used in certain cases of heart insufficiency until treatment with rest in bed and a milk diet has been tried.—Deutsch. Arch. klin. Med. 1919, v. 128, p. 165–172.

Christian, H. A.: A note on digitalis therapy. Satisfactory effects were obtained in cardiac cases regardless of whether the heart was rhythmical or arrhythmical.—Am. J. Med. Sci. 1919, v. 157, p. 593–602.

Kay, W. E.: In the wards of the medical clinic at Stanford Medical School, digitalis is administered rapidly in cardiac decompensation.—Calif. State J. Med. San Francisco, 1919, v. 17, p. 329, through J. Am. M. Assoc. 1919, v. 73, p. 1008.

Sutherland, G. A.: A study of the effect of digitalis on rapid, regular, and rheumatic heart shows that the drug can be used with as much confidence in its efficient and beneficial action as in cases of auricular fibrillation.—Quarterly J. Med. Oxford, 1919, v. 12, p. 183, through J. Am. M. Assoc. 1919, v. 73, p. 67.

Pardee, Harold E. B.: Principles of the new method of administering digitalis are stated, emphasizing the need of saturation in the patient.—New York M. J. 1919, v. 110, p. 1064–1066.

Wedd, Alfred M.: Observations on the therapeutic action of tincture of digitalis. Tinctures supplied to the hospital wards showed marked variation in their efficiency.—J. H. Hosp. Bull. 1919, v. 30, p. 131–136.

Abrahams, Robert: A discussion on the use of digitalis in heart and lung diseases.—New York M. J. 1919, v. 110, p. 337–339, 383–384.

Harris, I.: A study of the influence of digitalis on the different phases of the heart beat, with special reference to the intracardiac pressure.—Quart. J. Med. 1919, v. 13, p. 63–70.

Layton, O. M.: A discussion of the value of digitalis in cardiorenal disturbances.—Wis. Med. J. 1919, v. 17, p. 435–437.

Halsey, Robert H.: A discussion of the profound effects of digitalis on the vagus producing severe detrimental subjective symptoms, as shown by electro-cardiograms and pneumograms.—Proc. Soc. Exper. Biol. & Med. 1919, v. 17, p. 36–38.

DIOSCOREA, N. F.

Editorial: A description of the *Dioscorea villosa*, or wild yam, and notes on its medicinal use.—Eclectic M. J. 1919, v. 79, p. 608–609.

ECHINACEA, N. F.

Farwell, O. A.: *Echinacea angustifolia*, DeCandole should not be classed as a synonym of *Brauneria pallida* (Nuttall) Britton, but should be maintained as a distinct species under the name *Brauneria angustifolia* (DeCandole) Heller.—Drug. Circ. 1919, v. 63, p. 49.

ELIXIRIA.

Diner, Jacob: The elixirs of the bromides of the N. F. IV are classed as unscientific preparations because of the fact that they contain alcohol, which acts as a stimulant.—J. Am. Pharm. Assoc. 1919, v. 8, p. 96.

Hommell, P. E.: Elixir of citrate of iron and quinine is suggested for the N. F. It can be easily prepared, has good keeping qualities, and is well borne by the patient. In fact, it is devoid of the usual drawbacks observed in other forms of administration.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR AROMATICUM.

Anon.: Compound spirit of orange should be kept in a cold place for three or four months before it is used in order to blend the oils. The use of this blended spirit and sugar instead of syrup in the preparation of aromatic elixir will yield a product superior to that prepared according to the U. S. P.—J. Am. Pharm. Assoc. 1919, v. 8, p. 293–294.

ELIXIR BISMUTHI, N. F.

Diner, Jacob: The liquid preparations containing bismuth salts in solution are stated to be irrational from the standpoint of the pharmacologist. In therapeutics, bismuth salts are employed for their local and not systemic effects. For this purpose the insoluble salts of bismuth are used.—J. Am. Pharm. Assoc. 1919, v. 8, p. 97.

Hommell, P. E.: The use of elixir of bismuth is limited on account of the alcohol which it contains. Bismuth magma is a more effective preparation in gastric and intestinal inflammation.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

ELIXIR BUCHU, N. F.

Hommell, P. E.: Elixir of buchu is not necessary in the N. F., as the compound elixir is a more satisfactory preparation for diuretic exhibition.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

Diner, Jacob: The formula for the elixir of buchu is stated to be irrational, because alcohol acts as an irritant to the renal epithelium and the constant irritation of the kidney by alcohol leads to degenerative changes.—J. Am. Pharm. Assoc. 1919, v. 8, p. 97.

ELIXIR CARDAMOMI COMPOSITUM, N. F.

Hommell, P. E.: It is suggested that compound elixir of cardamom can be improved by the addition of cudbear. Some frown on colors for the N. F. preparations, but anything which tends to elegance in the galenicals should not be overlooked, be it odor, taste, or color.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR CATHARTICUM COMPOSITUM, N. F.

Hommell, P. E.: It is suggested that compound cathartic elixir can be improved by the addition of licorice.—Proc. New Jersey Pharm. Assoc. 1919, p. 42–43.

ELIXIR CINCHONÆ ALKALOIDORUM, N. F.

McElhenie, Thomas B.: In the preparation of the elixir of cinchona alkaloids, the use of the hydrochlorides instead of the sulphates is recommended, as this produces a clear preparation at once.—J. Am. Pharm. Assoc. 1919, v. 8, p. 557.

Hommell, P. E.: While elixir of cinchona alkaloids is a fine preparation pharmaceutically, from a therapeutic standpoint, the author has obtained a better tonic action from an elixir of the bark combined with agreeable aromatics.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR CINCHONÆ ALKALOIDORUM FERRI ET STRYCHNINÆ, N. F.

Hommell, P. E.: No better combination than elixir of cinchona alkaloids, iron, and strychnine is known, where the use of these drugs is indicated.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR ERIODICTYI AROMATICUM, N. F.

Hommell, P. E.: Aromatic elixir of eriodictyon is decidedly inferior to the aromatic syrup of the drug as a disguiser of bitter taste. The latter is a more aromatic, denser, and sweeter vehicle for disguising bad-tasting medicines.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR FERRI PYROPHOSPHATIS, QUININÆ ET STRYCHNINÆ, N. F.

Whorton, Carl: The Beringer formula for the preparation of the elixir of iron, quinine, and strychnine pyrophosphates is stated to yield a more satisfactory product than that prepared by the N. F. method.—Proc. Alabama Pharm. Assoc. 1919, p. 93–94.

ELIXIR FERRI, QUININÆ ET STRYCHNINÆ, N. F.

McElhenie, Thomas B.: The use of strychnine hydrochloride in place of strychnine sulphates in the preparation of the elixir of iron, quinine, and strychnine is suggested.—J. Am. Pharm. Assoc. 1919, v. 8, p. 557.

Anon.: Data obtained by the Bureau of Chemistry in the analysis of adulterated or misbranded samples of elixir of iron, quinine, and strychnine are reported.—S. R. A. Chem. Suppl. 1919, No. 58, p. 437; No. 59, p. 467–469, 496; No. 60, p. 536.

ELIXIR GENTIANÆ ET FERRI PHOSPHATIS, N. F.

Hommell, P. E.: Elixir of gentian and ferric phosphate has no decided advantage over the elixir of gentian and iron, which is better and more often prescribed. Some glycerine should be added in order to improve and preserve it.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR GLYCEROPHOSPHATUM COMPOSITUM, N. F.

Scoville, Wilbur L.: The compound elixir of glycerophosphates precipitates on standing and precipitation is not prevented by the addition of glycerine. It is suggested that probably more acid is needed.—J. Am. Pharm. Assoc. 1919, v. 8, p. 745.

McElhenie, Thomas B.: The addition of 8 grams of citric acid is recommended as an improvement in the formula for compound elixir of glycerophosphates.—J. Am. Pharm. Assoc. 1919, v. 8, p. 556.

ELIXIR GLYCYRRHIZÆ.

Hommell, P. E.: The elixir of glycyrrhiza is most valuable in rendering a large number of remedial agents palatable. It requires no improvement and should remain in the U. S. P.—Proc. New Jersey Pharm. Assoc. 1919, p. 41.

ELIXIR GLYCYRRHIZÆ AROMATICUM, N. F.

Hommell, P. E.: Aromatic elixir of glycyrrhiza is a splendid vehicle for bitter and nauseous drugs, and is far superior to the aqueous elixir of licorice.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR HUMULI, N. F.

Hommell, P. E.: The formula for elixir of hops can be improved by substituting aromatic elixir of glycyrrhiza for the elixir of taraxacum.--Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR PHOSPHORI ET NUCIS VOMICÆ, N. F.

Hommell, P. E.: Elixir of phosphorous and nux vomica should be deleted from the N. F. as the elixir of phosphorous is usually prescribed with strychnine in amount to suit individual cases.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR RUBI COMPOSITUM, N. F.

Hommell, P. E.: The bark and fruit used in making compound elixir of blackberry contain enough tannic acid for astringency in in bowel trouble without the addition of nutgall.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

ELIXIR SODII HYPOPHOSPHITIS, N. F.

Hommell, P. E.: While the formula for elixir of sodium hypophosphite is good, there is no demand for this preparation, as physicians usually exhibit this salt in syrup form, especially in nervous diseases where alcohol in any form is interdicted.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR SODII SALICYLATIS, N. F.

Hommell, P. E.: It is suggested that it would be best to direct the use of a salt made from the natural acid in elixir of sodium salicylate, as the synthetic salt is more depressing to the circulatory system, and for that reason the author states he has often had to reduce the dose of the present elixir. The vehicle should also be improved.—Proc. New Jersey Pharm. Assoc. 1919, p. 43

ELIXIR TARAXACI COMPOSITUM, N. F.

Hommell, P. E.: Compound elixir of taraxacum is a good vehicle for a number of drugs, enhancing therapeutic action and preventing stomach derangement, however, it requires some improvement, as it frequently precipitates. It is believed this can be prevented by the addition of a proper amount of glycerin.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

ELIXIR TRIUM BROMIDORUM, N. F.

Hommell, P. E.: It is doubtful whether elixir of three bromides will ever become popular, as the other N. F. bromide elixirs have the demand at present. The syrup of bromides is the most satisfactory preparation because it contains but little alcohol. It is a therapeutic mistake to associate a stimulant with a sedative, like the bromides.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

ELIXIR VIBURNI OPULI COMPOSITUM, N. F.

Anon.: The working formula for the preparation of compound elixir of viburnum opulus as at present constituted leaves much to be desired as it produces a very poor preparation, both pharmacally and medicinally. It is stated that the ingredients of medicinal value are precipitated out from the liquid portion on keeping. Directions for preparing this elixir by percolation from the vegetable drugs are given in detail.—N. A. R. D. J. 1919, v. 27, p. 504–505.

ELIXIR ZINCI VALERATIS, N. F.

Hommell, P. E.: Elixir of zinc valerate is not popular, as prescribers invariably obtain better results from the drug in pill or tablet form.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

EMETINÆ HYDROCHLORIDUM.

Lahille, Abel: Color reactions of emetine hydrochloride with calcium chloride, ammonium molybdate, and potassium dichromate in the presence of sulphuric acid are described.—Arch. méd. exper. 1919, v. 27, p. 296, through Zentralbl. Biochem. u. Biophysik. 1919, v. 20, p. 398.

Éwe, G. E.: The U. S. P. test for the presence of cephaeline in emetine hydrochloride is considered to be too stringent, and, if literally interpreted, would exclude most of the emetine hydrochloride on the market. It is suggested that this qualitative test be replaced by a quantitative test, which is described in detail.—Am. J. Pharm. 1919, v. 91, p. 275–280.

Linde, O.: A report of an investigation of "viola emetine Boullay" obtained from the roots of *Violæ odoratæ* and *Violæ tricolor.*—Apoth.-Ztg. 1919, v. 34, p. 37–38.

Plumier-Clermont: A report of a study to determine the action of emetine hydrochloride on the pulmonary circulation.—Bull. acad. r. méd. Belgique, 1919, March, p. 353–370, through Physiol. Abstr. 1919, v. 4, p. 342.

Savignac, R., and Alivisatos, A.: A report of a case of emetine intolerance manifested by urticaria. A contribution to the elimination of emetine.—Bull. et Mem. Soc. Méd. Hôpitaux de Paris, 1919, v. 30, p. 214–216, through Chem. Abstr. 1919, v. 13, p. 1882.

Schlomovitz, B. H.: Emetine acts as a leucotoxin in rabbits and man.—J. Nat. Dent. Assoc. 1918, v. 5, p. 588–590, through Physiol. Abstr. 1919, v. 3, p. 528.

Bello, C. J.: Notes on the intravenous administration of emetine in the treatment of amœbic dysentery.—Observaciones y Notas, San Cristobal, Venezuela, 1919, v. 1, p. 190, through J. Am. M. Assoc. 1919, v. 72, p. 1336.

Erian, A.: The successful treatment of bilharziosis with massive doses of emetine is reported.—Practitioner (The), London, 1919, v. 103, p. 391–393.

EMETINA (NONOFFICIAL COMPOUNDS).

Rabak, William: A monograph on emetine bismuthous iodide, including an assay method and a review of the literature.—Rep. Chem. Lab. Am. M. Assoc. 1918, v. 11, p. 66–73.

Sollmann, Torald: Experimental data on the solubility of some intestinal ipecac preparations are presented. The solubility of emetine bismuthous iodide and alcresta ipecac in digestive solvents, in alkaline solvents, and in sodium bicarbonate solutions of different strengths was determined.—J. Am. M. Assoc. 1919, v. 73, p. 1125–1127.

van der Wielen, P.: Methods for the preparation of the bismuth iodide compounds of alkaloids from ipecac root other than emetine are described.—Pharm. Weekblad, 1919, v. 56, p. 786–788.

EMPLASTRA.

Mittelbach, Wm.: As none of the plasters are made at present by the retail pharmacist, descriptions of processes for their manufacture may well be eliminated from the Pharmacopœia.—Proc. Missouri Pharm. Assoc. 1919, p. 36.

Kilmer: Report of committee on surgical dressings and plasters. It is found that there is no deterioration in the alkaloidal strength of plasters due to aging.—Proc. Am. Drug Mfg. Assoc. 1919, p. 241–242.

Liesegang, Rafael E.: Several formulæ for the preparation of a rubber-free adhesive plaster are presented and discussed.—Pharm. Zentralh. 1919, v. 60, p. 385–388.

Anon.: Formulas for the preparation of pyrogallic acid plaster, calomel plaster, oil of cade plaster, oil of chaulmoogra plaster, et cetera, are given.—J. pharm. et chim. 1919, v. 20, p. 175–176.

Anon.: A formula for cod liver oil plaster is given as follows: lead plaster, 300 parts; yellow wax, 125 parts; cod liver oil, 175 parts.—Chem. & Drug. 1919, v. 91, No. 3, p. 50.

EMPLASTRUM PLUMBI.

Perez de Abeniz, D. L.: A discussion of various metallic soaps with special reference to lead plaster.—Farm. Españ. 1919, v. 51, p. 241–243, 257–260, 273–274.

EMULSA.

Anon.: A paper on the art of making emulsions.—N. A. R. D. J. 1919, v. 28, p. 61–68, 166–172, 869–871.

Scoville, Wilbur L.: Nearly all commercial emulsions are made to contain tragacanth as well as acacia in order to preserve homogeneity in appearance. A small amount of tragacanth prevents the formation of layers in the emulsion for a considerable period of time, and in some instances adds to palatability.—J. Am. Pharm. Assoc. 1919, v. 8, p. 745.

O'Connor, D. Chas.: Practical notes on the preparation of emulsions.—Spatula, 1919, v. 26, p. 49–52.

Hommell, P. E.: The emulsions of almond, asafetida, cod liver oil and turpentine should be added to the N. F. list. The emulsion of castor oil requires improvement, so far as palatability is concerned. A satisfactory formula for an emulsion of petroleum with hypophosphites should be introduced. The compound spirit of orange would prove a better flavor for the emulsion of petroleum than the present tincture of lemon peel.—Proc. New Jersey Pharm. Assoc. 1919, p. 41.

Clayton, W.: A review of the various theories of emulsification, with numerous references and a critical discussion of each theory.—J. Soc. Chem. Ind. 1919, v. 38, p. 113–118T.

Ornstein, L. S.: A mathematical demonstration of the variability with time of the distributions of emulsion particles.—Proc. Acad. Sci. Amsterdam, 1918, v. 21, p. 92–95, through Chem. Abstr. 1919, v. 13, p. 680.

Moore, William C.: Data obtained in the experimental emulsification of water and of ammonium chloride solutions in kerosene by means of lampblack are presented and discussed in the light of certain surface phenomena.—J. Am. Chem. Soc. 1919, v. 41, p. 940–946.

Hampshire, C. H., and Hawker, G. E. F.: A note on the preparation of a suet emulsion of vitamines for infant feeding.—Pharm. J. Lond. 1919, v. 103, p. 82.

ERGOTA.

Anon.: Owing to the great shortage of ergot in Austria, the Public Health Board has requested all flour mills and other establishments handling agricultural products to collect all the ergot which they may find.—Chem. & Drug. 1919, v. 91, No. 44, p. 53.

Wolter: The author confirms the hypothesis that the coloration in Rosenthaler's and Keller's test for ergotinine is due to oxidation as the test can be obtained by the use of hydrogen peroxide in place of ferric chloride. Directions for carrying out the test are described in detail.—Chem.-Ztg. 1918, v. 42, p. 446; Chem. & Drug. 1919, v. 91, No. 1, p. 47.

Gams, A.: U. S. patent No. 1,292,394. A method for obtaining the active constituents of ergot in the form of a powder is described.—Chem. Abstr. 1919, v. 13, p. 993.

Grimme, C.: A liquid extract of *Capsella bursa pastoris* is recommended as a substitute for ergot as a hæmostyptic.—Pharm. Ztg. 1919, v. 64, p. 388.

ERIODICTYON.

Éwe, G.: Two lots of yerba santa examined contained 11 and 15 per cent, respectively, of stems, while the U. S. P. permits only 5 per cent.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 92; J. Am. Pharm. Assoc. 1919, v. 8, p. 758.

EUCALYPTOL.

Anon.: Eucalyptol produced in Australia by the freezing process has a specific gravity of 0.9302 at 15°, a refractive index of 1.4576 at 20° and is optically inactive. The product obtained by the acid process is dextro-rotary.—Practitioner (The), London, 1919, v. 103, p. 320.

Fawsitt, C. E., and Fischer, C. H.: The freezing point of cineole was found to be 0.9° instead of —1° C. as usually given.—J. Roy. Soc. N. S. Wales, 1917, v. 51, p. 467–472.

EUCALYPTUS.

Maiden, J. H.: Notes on eucalyptus, with descriptions of four new species, *E. transcontinentalis*, *E. Jutsoni*, *E. Hillii*, *E. approximans*.—J. Proc. Roy. Soc. N. S. W. 1919, v. 53, p. 57–73, 107–115.

Anon.: A book review of volume 4, part 36 of a work by J. H. Maiden entitled *A Critical Revision of the Genus Eucalyptus*. The plants described and illustrated are *Eucalyptus occidentalis* Endlicher; *E. macrandra* F. v. M., *E. salubris* F. v. M.; *E. cladocalyx* F. v. M.; *E. cooperiana* F. v. M.; *E. confluens* W. v. Fitzgerald.—Pharm. J. Lond. 1919, v. 102, p. 390.

EUGENOL.

Kremers, F.: Rearrangement of phenyl allyl ethers into the isomeric allyl phenols. IV. Synthesis of eugenol from guaiacyl allyl ether.—Ann. Chem. 1919, v. 418, p. 110–120.

Anon.: Samples of eugenol examined showed a specific gravity of 1.0696 to 1.0750, a refractive index of 1.538 to 1.5405 at 20° C. and were optically inactive. Samples of isoeugenol gave a specific gravity of 1.078 to 1.080, a refractive index of 1.5675 and 1.5720 and were optically inactive.—Evans' An Notes, 1919, p. 54.

Perperot, H.: Methods are described for estimating the different components of a mixture containing eugenol, triacetin and benzyl alcohol.—Ann. chim. anal. chim. appl. 1919, v. 1, p. 112–114.

von Friedrichs, O.: Data obtained in the determination of menthol in solutions of eugenol by the optical method are presented and discussed.—Arch. Pharm. 1919, v. 257, p. 72–78.

EUPATORIUM, N. F.

Éwe, G.: One lot of material sold as wahoo bark consisted of the whole root.—J. Am. Pharm. Assoc. 1919, v. 8, p. 757.

EUONYMUS, N. F.

Editorial: A description of white snakeroot with notes on its use as a remedial agent.—Eclectic M. J. 1919, v. 79, p. 555–556.

EXTRACTA.

Oddo, Bernardo: Experimental data are given relative to the properties and analysis of the hydroalcoholic extract of *Cinchona calisaya*, the dry hydroalcoholic extract of *Aconitum napellus*, and the dry aqueous extract of aloe.—Ann. chim. applicata. 1919, v. 12, p. 74–103.

EXTRACTUM BELLADONNÆ FOLIORUM.

Goris, A., and Beausite, F.: A comparison of the assay methods of the Ph. Brit. and Ph. Fr. for extract of belladonna. The results obtained by the method of the Ph. Fr. represent the total alkaloids present, while those obtained by the Ph. Brit. method represent only the weight of hyoscyamine and atropine.—Bull. sc. pharmacol. 1919, v. 26, p. 53.

Rapp: A description of a new practical method for the evaluation of alkaloids of the German pharmacopœia, with special reference to the preparation and investigation of belladonna extract. The principal feature of the new process is the use of gypsum to facilitate extraction of the alkaloids with chloroform.—Apoth.-Ztg. 1919. v. 34, p. 21–22.

Anon.: An account of the chemical examination of Extractum Belladonna Viride, an extract prepared from the juice expressed from the fresh leaves and young branches of belladonna.—Evans' An. Notes, 1919, p. 26.

EXTRACTUM ERGOTÆ.

Glücksmann, C.: Four tests for the identification of extract of ergot are described.—Pharm. Presse, 1918, No. 30, through Pharm. Ztg. 1919, v. 64, p. 69.

EXTRACTUM HYOSCYAMI.

Anon.: Analytical data obtained in the examination of Extractum Hyoscyami Viride are presented. This is an extract prepared by evaporating the expressed juice of hyoscyamus leaves.—Evans' An. Notes, 1919, p. 60.

EXTRACTUM JALAPÆ, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for extract of jalap. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

EXTRACTUM PODOPHYLLI, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for extract of podophyllum. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

EXTRACTUM VIBURNI PRUNIFOLII.

Anon.: The appearance of the extract of viburnum prunifolium in the U. S. P. IX must have been a surprise to the Council of Medicine and Pharmacy of the A. M. A., which condemned it as worthless.—Drug Topics, 1916, No. 9, p. 7.

FERRI HYPOPHOSPHIS, N. F.

Weinland, R. F., and Hieber, W.: A report of researches on the constitution of the ferric salts of hypophosphorus acid.—Ztschr. anorg. Chem. 1919, v. 106, p. 15–45.

FERRI SULPHAS.

Zimmermann, Walther: A sample of Ferrum sulfuricum purum (alcoh. par.) examined, contained basic ferric sulphate.—Apoth.-Ztg. 1919, v. 34, p. 14.

FERRUM.

Wasicky, R.: A microchemical method for the identification of iron is based on the Berlin blue reaction.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 317.

Marinot, A.: A discussion of a project for the unification of methods for the analysis of iron and steel.—Ann. chim. anal. chim. appl. 1919, v. 1, p. 87–93.

Houben, J.: A description of a method which permits the determination of ferrous and ferric iron and free mineral acid in the same solution.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 2072–2076.

Blomberg, C.: An experimental study of the strength of oxidizing agents, with special reference to the iodometric titration of ferric and ferrous iron.—Pharm. Weekblad, 1919, v. 56, p. 793–794.

Kolthoff, I. M.: Analytical data obtained in the oxido-potentiometric estimation of iron are presented and discussed.—Chem. Weekblad, 1919, v. 16, p. 450–461.

Hostetter, J. C., and Roberts, H. S.: A report of experiments on electrometric titrations, with special reference to the determination of ferrous and ferric iron.—J. Am. Chem. Soc. 1919, v. 41, p. 1337–1357.

Kolthoff, I. M.: A study of volumetric methods for the determination of iron, with special reference to the iodometric method.—Pharm. Weekblad, 1919, v. 56, p. 1565–1568.

Vásárhely, Ladislaus: A description of a modified gravimetric method for the determination of iron.—Ztschr. anal. Chim. 1914, v. 53, p. 688, through Pharm. Zentralh. 1919, v. 60, p. 547.

Hostetter, J. C.: Experiments with the hydrochloric acid colorimetric method for determining iron are described.—J. Am. Chem. Soc., 1919, v. 41, p. 1531–1543.

Piva, A., and Salvedeo, U.: A critical review of methods for the rapid determination of carbon in steels and cast iron.—Ann. chim. applicata, 1918, v. 11, p. 113–129.

Johnson, Charles Morris: Methods are described for the determination of uranium, zirconium, chromium, vanadium, and aluminium in steel.—Chem. Met. Eng. 1919, v. 20, p. 523–524, 588–589.

Nicolardot, Paul, and Gourmain, Georges: A report of an experimental study of the electrolytic, dicyanodiamidine, and dimethylglyoxime methods for the determination of nickel in steel.—Bull. soc. chim. France, 1919, v. 25, p. 338–344.

Anon.: A description of Phillip's neutroscope for use in determining sulphur in iron and steel by the evolution method.—Iron Age, 1919, v. 103, p. 957, through Chem. Abstr. 1919, v. 13, p. 1269.

Molyneaux, M.: An adaptation of H. Phillip's neutroscope to the estimation of sulphur in iron and steel is described.—Chem. Trade J. 1919, v. 65, p. 146, through Chem. Abstr. 1919, v. 13, p. 2649.

Marinot, A.: A procedure for the rapid determination of sulphur in iron and steel is described.—Ann. chim. anal. chim. appl. 1919, v. 1, p. 153–155.

Maurin: A table is given showing the results obtained in the determination of manganese in 10 different iron salts used as therapeutic agents. From these data it is concluded that the therapeutic action of iron salts may be due indirectly to their manganese content.—Répert. Pharm. 1919, v. 32, p. 33–34.

Wasicky, R.: Microchemical methods for the detection of copper in iron salts are described.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 306.

Anon.: A book review calls attention to a volume by Vecchiotti Luigi entitled *I Preparati di ferro.*—Boll. chim. farm. 1919, v. 58, p. 18.

FERRUM REDUCTUM.

Vié, Georges: Notes on the preparation and properties of electrolytic iron. Iron 99 to 100 per cent pure can be prepared by this method.—Ann. chim. anal. chim. appl. 1919, v. 1, p. 175–177.

Wasicky, R.: A microchemical method for the detection of sulphides in reduced iron is described.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 317.

LaWall, Charles H., and Harrison, J. W. E.: Results obtained in the testing of commercial samples of reduced iron for sulphides are presented and discussed. The amount of sulphide present in six samples examined ranged from 0.124 per cent to 0.40 per cent.—J. Am. Pharm. Assoc. 1919, v. 8, p. 811–812.

Éwe, G.: All of the many lots of reduced iron examined during the past year contained sulphides in great excess of the U. S. P. allowance. All assayed over 90 per cent of metallic iron.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 86; J. Am. Pharm. Assoc. 1919, v. 8, p. 672.

FLUIDEXTRACTA.

Grimme, Cl.: Notes on the evaluation of Extractum Bursæ Pastoris Fluidum. The suggestion is made that, so long as the active principles of the drug are unknown, standards for density, extract and ash content, and lead number be determined.—Pharm. Ztg. 1919, v. 64, p. 388–389.

FLUIDEXTRACTUM ACONITI.

Dohme, A. R. L.: Data obtained in the assay of fluidextract of aconite by the U. S. P. VIII, U. S. P. IX, and a modified U. S. P. method are presented and discussed. The physiological assay of aconite is also discussed and some data bearing thereon are presented.—Proc. Am. Drug Mfg. Assoc. 1919, p. 260–265.

FLUIDEXTRACTUM CANNABIS.

Pittenger, P. S.: A fluidextract prepared from female cannabis assayed 200 per cent of the U. S. P. standard, whereas the fluidextract made from the male cannabis assayed only 50 per cent of the U. S. P. strength.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 173.

FLUIDEXTRACTUM CINCHONÆ.

Anon.: A sample of fluidextract of cinchona examined by the Bureau of Chemistry assayed 2.97 grams of anhydrous ether-soluble alkaloids per 100 cubic centimeters, whereas the U. S. P. provides that it shall contain 4 grams.—S. R. A. Chem. Suppl. 1918, No. 30, p. 638.

FLUIDEXTRACTUM CONDURANGO, N. F.

Bohrisch: The Ph. Germ. tests for determining the quality and purity of the fluidextract of condurango are inadequate, which fact has led the author to investigate various methods and reactions with a view to discovering dependable tests. The results of these investigations are discussed in detail.—Pharm. Zentralh. 1919, v. 60, p. 2–5, 17–21; Chem. Zentralbl. 1919, v. 2, p. 458.

FLUIDEXTRACTUM DIGITALIS.

Schmidt, James M., and Heyl, Frederick W.: Experimental data are given in the form of tables showing the stability of tincture and fluidextract of digitalis prepared by extracting the leaf with alcohol of different strength.—Am. J. Pharm. 1919, v. 91, p. 425–436.

FLUIDEXTRACTUM FRANGULÆ.

Emich, F.: A rational method for the preparation of fluidextract of frangula consists in macerating the drug in a percolator with double its weight of solvent for five or six days and then allowing percolation to proceed at the rate of 150 to 200 drops per minute.—Pharm. Ztg. 1919, v. 64, p. 206; Chem. Zentralbl. 1919, v. 2, p. 956.

Richter, Ernst: Data relative to the amount of emodin contained in fluidextract of frangula are given. It is proposed that the new Ph. Germ. require a definite emodin content instead of the present dry residue requirement.—Apoth.-Ztg. 1919, v. 34, p. 122; Schweiz. Apoth.-Ztg. 1919, v. 57, p. 590.

FLUIDEXTRACTUM GLYCYRRHIZÆ.

Armentano, Anthony: A method of preparing a stable fluidextract of licorice is described. Maceration and percolation with boiling water is recommended.—J. Am. Pharm. Assoc. 1919, v. 8, p. 958–959.

Anon.: The gelatinization of the fluidextract of licorice is said to be caused by the presence of a large amount of pectin in the liquid. It is further stated that gelatinization can be prevented by the use of the proper amount of ammonia water of U. S. P. strength.—N. A. R. D. J. 1919, v. 27, p. 719–720.

FLUIDEXTRACTUM IRIDIS VERSICOLORIS, N. F.

Canan, C. W.: An enumeration of some of the therapeutic virtues of iris versicolor, the "vegetable mercurial."—Am. J. Clin. Med. 1918, v. 25, p. 209–210.

FLUIDEXTRACTUM JALAPÆ, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for fluidextract of jalap. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

FLUIDEXTRACTUM KOLÆ, N. F.

Slis, I.: The value of a clear fluidextract of kola is much below the required standard, because some of the caffeine is carried down with the solid material which settles to the bottom. A more concentrated alcohol than prescribed by the Ph. Ndl. should be used in making the preparation.—Pharm. Weekblad, 1919, v. 56, p. 1071.

Scoville, Wilbur L.: A purity rubric should be prescribed for fluidextract of kola. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

FLUIDEXTRACTUM SANGUINARIÆ, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for fluidextract of sanguinaria. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

FLUIDGLYCERATA, N. F.

Hommell. P. E.: The list of fluidglycerates in the N. F. should be extended, especially in the case of vegetable drugs where alcoholic vehicles are contraindicated, as in the case of condurango for cancer of the stomach; buchu, uva ursi, triticum, corn silk, and pareira for inflammatory conditions of bladder and kidneys; cypripedium and skullcap for nervous disorders, and spigelia for intestinal worms.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

FŒNICULUM.

Styger, Jos.: A contribution to our knowledge of the anatomy of the fruits of various species of fennel.—Schweiz. Apoth.-Ztg. 1919, v. 56, p. 171–174.

Houston, D. F.: The following is the standard for fennel seed given by the U. S. Department of Agriculture: "Fennel seed is the dried fruit of cultivated varieties of *Fœniculum vulgare* Hill. It yields not more than 9 per cent of total ash, nor more than 2 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 13.

Alsberg, Carl L., et al.: Several shipments of fennel seed have proven, upon examination, to be the fruits of wild fennel, *Fœniculum piperitum* Sweet.—J. Am. Pharm. Assoc. 1919, v. 8, p. 470.

GALANGAL, N. F.

Farwell, O. A.: The proper combination for the botanical source of galangal is *Languas officinarum* (Hance) N. Comb.—Drug. Circ. 1919, v. 63, p. 49.

GALLA.

Nierenstein, M.: A chemical study of the tannin obtained from the nutgalls of *Quercus cerris*.—J. Chem. Soc. Lond. 1919, v. 115, p. 1174.

Gonnermann, M. M.: The presence of 2.5 per cent of alumina in the ash of fresh galls is reported.—Biochem. Ztschr. 1918, v. 88, p. 401–415.

GAMBIR.

Lipman, L. J.: Four lots of gambir examined assayed over 60 per cent alcohol-soluble matter, as required by the U. S. P. Two other lots assayed 45 per cent and 55 per cent, respectively.—J. Am. Pharm. Assoc. 1919, v. 8, p. 672.

GELATINUM.

Herzfeld, E., and Klinger, R.: Chemical studies on physiology. V. Gelatin is regarded as a mixture of polypeptides polymerized by means of calcium salts.—Biochem. Ztschr. 1918, v. 88, p. 232-282, through J. Chem. Soc. London, 1918, v. 114, part 2, p. 355.

Loeb, Jacques: Amphoteric colloids. III. The chemical basis of the influence of acid upon the physical properties of gelatin. IV. The influence of the valency of cations upon the physical properties of gelatin.—J. Gen. Physiol. 1919, v. 1, p. 363–385, 483–504.

Smith, C. R.: An investigation of the multarotation of gelatin and its significance in gelation.—J. Am. Chem. Soc. 1919, v. 41, p. 135–150.

Shreve, Edith B.: A report of investigations on the absorption of water by gelatin.—J. Franklin Inst. 1919, v. 187, p. 319–337.

Liesegang, R. E.: Notes on the liquefaction of gelatin and agar-agar by means of calcium salts.—Farben-Ztg. 1919, v. 24, p. 971–972, through Chem. Abstr. 1920, v. 14, p. 486.

Bennett, H. G., and Holmes, N. L.: A note on Kjeldahl's method for the determination of nitrogen as applied to gelatin.—J. Soc. Leather Trades Chem. 1919, v. 3, p. 24–27.

Jamieson, George S.: A description of a method for the determination of zinc and copper in gelatin, based upon the complete destruction of the organic matter by digestion with nitric and sulphuric acids.—J. Ind. & Eng. Chem. 1919, v. 11, p. 323–325.

Plöcker: Copper in gelatin can not be determined by the method of the Ph. Germ. if the latter contains sulphur compounds, especially calcium sulphate. A satisfactory method for use under these conditions is described.—Chem. Ztg. 1917, v. 41, p. 800, through Pharm. Zentralh. 1919, v. 60, p. 251.

Anon.: All samples of gelatin examined answered the requirements of the Ph. Brit., with the exception of the jelly test. Some samples only form a jelly when 1 in 40, or even 1 in 30 parts of water are taken.—Evans' An. Notes, 1919, p. 56.

Anon.: The Bureau of Chemistry reports the presence of excessive quantities of glue, arsenic, zinc, and copper in samples of gelatin examined.—S. R. A. Chem. Suppl. 1919, No. 58, p. 429, 430; No. 59, p. 473, 492; No. 60, p. 529, 539, 540; No. 61, p. 33.

Wiedemann, H. E.: Of 3 samples of gelatin examined, one contained a large amount of glue.—Rep. Missouri F. & D. Com. 1918, p. 13, 14.

Schmerz, H., and Wischo, F.: Observations on man have led to the conclusion that the blood-coagulating power of gelatin is due to the calcium it adsorbs and is proportional to the amount of calcium present.—Abstr. Bact. 1918, v. 2, p. 253.

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Klemm, E.: Glycerogelatin preparations are stabilized by subjecting them, after solidification, to the vapors of formaldehyde slowly generated by gently heating paraformaldehyde.—Südd. Apoth.-Ztg. 1918, v. 58, p. 174, through Chem. Zentralbl. 1918, v. 2, p. 214–215.

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Alsberg, Carl L., et al.: At the present time supplies of a new species of glycyrrhiza are being received from Asia. The material is obtained from *Glycyrrhiza uralensis* Fischer, known as "Asiatic licorice." A sample tested by the U. S. P. method yielded 27 per cent of extractive to hot water. The U. S. P. requirement is 20 per cent.—J. Am. Pharm. Assoc. 1919, v. 8, p. 468.

GOSSYPII CORTEX, N. F.

Éwe, G.: One lot of cotton root bark examined contained 30 per cent of wood, whereas the N. F. limits the wood to not more than 5 per cent.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 84; J. Am. Pharm. Assoc. 1919, v. 8, p. 671.

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Éwe, G.: One lot of *Grindelia robusta* examined contained 30 per cent of foreign plants. Another lot contained an excess of stems.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 85; J. Am. Pharm. Assoc. 1919, v. 8, p. 672.

GUAIACOL.

Keenan, F. J.: The presence of impurities in two lots of guaiacol examined was indicated on account of its failure to separate into two layers, as required in the U. S. P. petroleum benzine test, and to congeal, as required in the U. S. P. potassium hydroxide test.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 85.

Roberts, J. G.: One lot of guaiacol examined was of U. S. P. quality, except that it contained oily hydrocarbons.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 85.

McMaster, Philip D.: In an investigation of the germicidal power of antiseptic oils and of substances dissolved in oil it was found that the minimal killing concentration of guiaiacol is 0.8 to 1 per cent.—J. Infec. Dis. 1919, v. 24, p. 378–385.

Kondo, S.: In a study of the effect of various aromatic substances on the blood vessels it was found that guaiacol is a more powerful vasodilator than pyrocatechol.—Japanese Med. Lit. 1919, v. 4, p. 18.

Grau, Charles A.: A study of the chemical and physical properties of guaiacol sulphonate, commonly known as thiocol.—Bull. sc. pharmacol. 1919, v. 26, p. 97–105.

GUAIACOLIS CARBONAS.

Maue: A test for the identification of guaiacol carbonate consists of dissolving 0.02 gram of the substance in 1 cubic centimeter of alcohol and adding two drops of solution of chloride of iron and one drop of formaldehyde solution. The mixture is then carefully poured upon two cubic centimeters of sulphuric acid. After several minutes a raspberry colored ring will form at the zone of contact of the two liquids.—Pharm. Ztg. 1918, p. 255, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 34.

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Schroeter, G., et al.: Among the products obtained by the dry distillation of guaiacum resin are two substances of unknown composition, pyroguaiacine and guaiene. The composition of these and other products is discussed.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 1587–1613, through J. Soc. Chem. Ind. 1919, v. 38, p. 55A.

Lipman, L. J.: In 16 samples of guaiac examined, the alcohol-soluble matter ranged from 74.7 to 87.3 per cent and the ash yield from 3.00 to 6.4 per cent. The U. S. P. requires not less than 85 per cent alcohol-soluble matter and not more than 4 per cent yield of ash.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 68; J. Am. Pharm. Assoc. 1919, v. 8, p. 672.

Éwe, G. E.: Three of eleven lots of guaiac examined contained excessive alcohol-insoluble matter as follows: 25.2 per cent, 25.5 per cent, and 28.1 per cent, respectively. The U. S. P allows 15 per cent.—Proc. Pennsylvania Pharm. Assoc. 1916, p. 113.

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Freudenberg, Karl: A chemical study of the tannin of *Hamamelis virginica*.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 177–185.

HELIANTHEMUM, N. F.

Farwell, O. A.: The botanical sources of the species constituting the commercial drug known as helianthemum should be given as follows: *Trichasterophyllum canadense* (Linné) N. Comb. and T. Major (Linné) N. Comb.—Drug. Circ. 1919, v. 63, p. 49.

Issleib, Max: It is noted that an alcoholic extract of the leaves and young stems of helianthus is used successfully in place of quinine in the malarial regions of Siberia.—Apoth.-Ztg. 1919, v. 34, p. 281.

HEXAMETHYLENAMINA.

Cohn, G.: An alphabetical review of the urotropine compounds of therapeutic interest. Citations to the earliest literature are given.—Pharm. Zentralh. 1919, v. 60, p. 29–33, 42–47, 53–57, 65–69, 77–80, 92; Chem. Zentralbl. 1919, v. 2, p. 530.

Büchmann, E.: Notes on some new combinations of hexamethylenamine.—Pharm. Zentralh. 1919, v. 60, p. 133–135.

Utz, F.: Data showing the solubility of hexamethylenamine in various organic solvents at ordinary temperatures are presented.—Südd. Apoth.-Ztg. 1919, v. 59, p. 832.

Trendelenburg, Paul: A report of quantitative measurements of the rate of decomposition of hexamethylenamine into formaldehyde and ammonia under different conditions.—Biochem. Ztschr. 1919, v. 95, p. 146–163.

Stuwe: A volumetric method for the determination of formaldehyde and hexamethylenamine is described. The method is based on the reduction of mercuric chloride and the determination of the precipitated mercury by titration with N/10 thiosulphate solution.—Pharm. Centralb. 1918, p. 27, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 33.

Loeper and Grosdidier: Notes on the use of hexamethylenamine and methylene blue in grippe. It is reported that in doses which aggregate 2 to 3 grams daily, hexamethylenamine is antithermic, sedative, and diuretic.—Le Progrès Médical, 1918, v. 26, Dec. 21, through Med. Rec. 1919, v. 95, p. 379.

Cabannes, E.: A case of pronounced idiosyncrasy to hexamethyleneamine is reported. Pain resembling that of indigestion was noted even after a dose of 8 grains.—Répert. Pharm. 1919, v. 30, p. 161–162.

HOMATROPINÆ HYDROBROMIDUM.

Cushny, A. R.: An investigation of the physiological activity of optical isomers of the tropeines has shown that l-homoatropine is twice as active as the d- form.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 71–93.

Wichura, W.: An investigation of the pharmacologic properties of certain derivatives of homatropine, such as mydriasine, benzylhomatropine, and the mandelic acid salt of homatropine.—Ztschr. exper. Path. u. Therap. 1919, v. 20, p. 1–13.

HUMULUS.

Wöllmer, W.: From investigations, it is concluded that the α- and β- bitter acids of hops are represented by the formulas $C_{21}H_{30}O_4$ or $C_{26}H_{30}O_5$. These substances are not true acids, their acid character being due to the presence of hydroxyl groups. They are, therefore, more appropriately termed "humulone" and "lupulone."—Biedermann's Zentr. 1918, v. 47, p. 158–159, through Chem. Abstr. 1919, v. 13, p. 495.

Schmidt, Johs.: A note on the occurrence of wild hops in Denmark. The amount of bitter principles contained in these hops is often greater than 14 per cent.—Ztschr. f. ges. Brauwesen, 1918, v. 41, p. 255, 259–261, 265–266, 278–280, through Chem. Zentralbl. 1919, v. 2, p. 273.

Russell, G. A.: Data showing the effect of fertilizers on the composition of hops are presented.—J. Ind. & Eng. Chem. 1919, v. 11, p. 218–224.

HYDRARGYRI CHLORIDUM CORROSIVUM.

Chapman, David L., and Jenkins, William J.: A study of the action of acetylene on mercuric chloride. A compound having the formula $HgCl_2.C_2H_2$ is formed by the action of acetylene on mercuric chloride in absolute alcohol.—J. Chem. Soc. Lond. 1919, v. 115, p. 847–849.

Tourneux, C.: A study of the compounds formed in the combination of mercuric chloride with alkali chlorides.—Ann. chim. applicata, 1919, v. 11, p. 225–361.

Utz: A description of a volumetric method for the determination of mercury salts, with special reference to its application to compounds containing mercuric chloride.—Pharm. Zentralh. 1919, v. 60, p. 301–302.

Tunmann, O.: Notes on the identification of mercuric chloride obtained in the Stas-Otto method for the separation of poisons.—Apoth.-Ztg. 1918, v. 33, p. 454, through Pharm. Zentralh. 1919, v. 60, p. 524–525.

Rosenbloom, Jacob: Studies in a case of acute mercuric chloride poisoning treated by the newer methods and followed by recovery.—Am. J. Med. Sci. 1919, v. 157, p. 348–356.

Hammer, F.: A report of a case of fatal mercurial poisoning following sublimate injections in the treatment of varicose veins. The dose was only 1 centigram of the salt.—Deutsch. med. Wchnschr. 1919, v. 45, Jan. 9, through Med. Rec. 1919, v. 95, p. 501.

Anon.: A report of a fatal case of poisoning in a woman who swallowed a 5-grain tablet of mercuric chloride.—Pharm. J. London, 1919, v. 102, p. 112.

HYDRARGYRI CHLORIDUM MITE.

Duret, P.: A method for the preparation of very finely divided calomel is described. Ten grams of the product are stated to occupy about 15 cubic centimeters of space, whereas the product usually obtained by sublimation occupies but 5 cubic centimeters.—Ann. Inst. Pasteur, 1919, v. 33, p. 174, 181; J. pharm. et chim. 1919, v. 19, p. 349–351.

Paderi, C.: Attention is called to the physiologic incompatibility of calomel and antipyrine. The toxic symptoms produced by the administration of a mixture of these substances is thought to be due to the formation of a soluble combination of mercury and antipyrine in the alkaline medium of the intestines. An abstract.—Arch. farmacol. sper. 1919, v. 28, p. 113–124; Pharm. Weekblad, 1919, v. 56, p. 1310.

Holt, Thomas: Of 21 samples of calomel tablets examined, 2 were found to be adulterated.—Rep. Connecticut D. & F. Com. 1919, p. 21.

HYDRARGYRI IODIDUM FLAVUM.

Siegfried, M.: The influence of lipoids on the rate of reaction. Lecithin inhibits the transformation of yellow mercuric iodide into the red variety.—Biochem. Ztschr. 1918, v. 86, p. 98–109; J. Chem. Soc. London, 1918, v. 114, part 2, p. 223.

HYDRARGYRI OXIDUM FLAVUM.

Perez, D. L., and Albeniz: Notes on the preparation of yellow precipitate.—Farm. Españ. 1919, v. 51, p. 39–41.

Éwe, G.: One lot of yellow mercuric oxide examined was alkaline to litmus. Another lot was alkaline to litmus and alkaline to methyl orange (equal to 0.072 per cent sodium carbonate). A third lot was alkaline to litmus, neutral to phenolphthalein and alkaline to methyl orange (equal to 0.949 per cent sodium carbonate). The U. S. P. requires that yellow mercuric oxide be neutral to litmus.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 88; J. Am. Pharm. Assoc. 1919, v. 8, p. 754.

HYDRARGYRI SALICYLAS.

Costantino, O.: A method for the estimation of mercury in mercury salicylate is described. The salicylate is dissolved in sulphuric acid and the solution electrolyzed in a platinum dish.—Giorn. farm. chim. 1918, v. 67, p. 7–12; Chem. Zentralbl. 1919, v. 90, p. 4–5; J. Soc. Chem. Ind. 1919, v. 38, p. 233A.

Gadamer, J.: A criticism of the Ph. Germ. method for the determination of mercury in mercury salicylate.—Arch. Pharm. 1918, v. 256, p. 263, through Pharm. Zentralh. 1919, v. 60, p. 418.

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Menzies, A. W. C.: Data obtained in the measurement of the vapor pressure of mercury in the range 120 to 250° C. are given.—J. Am. Chem. Soc. 1919, v. 41, p. 1783–1787.

Bender, Julie: It is estimated that the critical temperature of mercury lies between 1500 and 1600°C., and the critical density between 4 and 5. The critical pressure is greater than 180.—Physik. Ztschr. 1918, v. 19, p. 410–414, through Chem. Abstr. 1919, v. 13, p. 1171.

Chappuis, P.: Data obtained in a new determination of the expansion of mercury are presented.—Sci. Abstr. 1919, v. 22A, p. 443.

Mayrhofer, A.: Sublimation methods for the identification of mercury in mercury compounds are described.—Ztschr. allgem. österr. Apoth.-Ver. 1918, v. 56, No. 3, p. 42–43, through Pharm. Zentralh. 1919, v. 60, p. 444

Abelmann, Arthur: A new color reaction for the identification of mercury in organic combinations is based on the formation of a red-violet ring when a weak nitric acid solution of the mercury compounds is poured on concentrated sulphuric acid containing ferrous sulphate.—Pharm. Zentralh. 1919, v. 60, p. 247–248.

Low, A. H.: A description of a volumetric method for the determination of mercury. The mercury is converted into the sulphide which is brought into solution by means of sulphuric acid and potassium permanganate. The color, due to the excess of permanganate, is removed by the addition of oxalic acid and the mercury is finally titrated with N/10 thiocyanide solution using ferric ammonium sulphate as the indicator.—Chem. Analyst, 1919, No. 29, p. 13–14.

Jamieson, George S.: Methods for the gravimetric and volumetric determination of mercury precipated as mercury zinc thiocyanate are described.—J. Ind. & Eng. Chem. 1919, v. 11, p. 296–297.

Abelmann, Arthur: A description of a modification of Glückmann's method for the determination of mercury. The modification avoids the unsatisfactory results due to the solubility of HgC_2O_4 and the tendency to form basic salts.—Ztschr. anal. Chem. 1919, v. 58, p. 443–445.

Piña de Rubies, S.: A description of an exact and rapid method for the estimation of mercury in the majority of its compounds. The mineral is mixed with fine iron powder and heated in a porcelain crucible, on the cover of which the volatilized mercury is condensed.—Anales soc. española fis. quim. 1918, v. 16, p. 661–689.

Utz: A volumetric method for the determination of mercury in mercury salts is described, also the procedure for the evaluation of sublimate gauzes.—Pharm. Zentralh. 1919, v. 60, p. 301–302.

Anon.: A note on the estimation of mercury as metal by reduction with hypophosphorus acid.—Evans' An. Notes, 1919, p. 108–109.

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HYDRASTININÆ HYDROCHLORIDUM.

Rosenmund, Karl W.: A new synthesis of hydrastinine and its homologues is described.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 200–206.

HYDRASTIS.

Röntsch, B.: Notes on the cultivation of *Hydrastis canadensis.*—Heil- und Gewürzpfl. 1919, v. 3, No. 5, p. 105–107.

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Belloni, E.: A chemical investigation of the rhizome of *Hydrastis canadensis* L. Data showing the moisture content, the ash content, the hydrastine content, and the berberine content are given. The hydrastine was determined by several different methods. The method of Dichgans was found to be the most practical. Berberine was determined by the method of Gordin.—Boll. chim.-farm. 1919, v. 58, p. 81–91.

Wasicky, R., and Joachimowitz, M.: Data are given showing the hydrastine and berberine content of *Hydrastis canadensis* grown in Austria.—Arch. Pharm. 1917, v. 255, p. 497–506, through J. Soc. Chem. Ind. 1919, v. 38, p. 737a.

van den Berg, L. M.: Recommendations are made for standardizing the Ph. Ndl. methods of analysis for the crude drug and medicinals prepared from hydrastis.—Pharm. Weekblad, 1919, v. 56, p. 1124–1134.

Schmidt, Elsa: A new method for the separate extraction of hydrastine and berberine from golden seal on a large scale is described. The hydrastine is extracted with benzol containing a small quantity of ammonia. The berberine is subsequently extracted from the marc by means of water acidulated with acetic acid.—Am. J. Pharm. 1919, v. 91, p. 270–275.

Ewing, C. O., and Viehoever, Arno: Thirty-one commercial samples of hydrastis rhizome showed a range of 4.49 per cent to 17.81 per cent of total ash and 1.27 to 11.22 per cent acid-insoluble ash.—J. Am. Pharm. Assoc. 1919, v. 8, p. 726–727.

Éwe, G.: One lot of hydrastis examined was rejected as it assayed only 0.735 per cent alkaloids, the U. S. P. requirement being not less than 2.5 per cent.—J. Am. Pharm. Assoc. 1919, v. 8, p. 672.

Grimme, C.: A note on the possibility of using *Capsella bursa pastoris*, Moench. as a substitute for ergot and hydrastis.—Pharm. Ztg. 1919, v. 64, p. 388.

Wasicky, R.: A chemical biological study of *Erodium cicutarium* showed that this plant, which has been proposed at various times as a substitute for hydrastis, contains no organic substances the action of which is similar to that of hydrastis on the uterus.—Wien. klin. Wchnschr. 1919, v. 32, p. 1, through Zentralbl. Biochem. & Biophys. 1919, v. 20, p. 511.

HYOSCYAMINÆ HYDROBROMIDUM.

Cushny, A. R.: The laevo isomer of hyoscyamine was found to be about forty times as active as the dextro form. Two milligrams of the dextro isomer are almost equivalent to 0.1 milligram of atropine with respect to the secretion of saliva.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 71–93.

HYOSCYAMUS.

Koch, George P.: Experimental notes on the cultivation of *Hyoscyamus niger*. Data are also presented showing the alkaloidal content of the various parts of the plant.—Am. J. Pharm. 1919, v. 91, p. 68–83.

de Graaff, W. C.: The cultivation of hyoscyamus in Holland.—Pharm. Weekblad, 1919, v. 56, p. 1105–1106.

Hommell, P. E.: The U. S. P. should direct that hyoscyamus leaves be preserved in tightly closed containers protected from the light.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

Rustung: Norwegian henbane leaves of 1918 contained 0.02 per cent of alkaloids and 10.66 per cent of water.—Norges Apoth. Tidskr. 1918, p. 381, through Schweiz. Apoth. Ztg. 1919, v. 57, p. 339.

Ewing, C. O., and Viehoever, Arno: A lower ash standard than the present limit of 30 per cent should be specified for hyoscyamus. Analyses of 12 commercial samples made by analysts of the Bureau of Chemistry showed a range of 18.2 to 30.52 per cent of total ash, and 11.6 per cent to 19.05 per cent of acid-insoluble ash. An ash standard of 24 per cent supplemented by an acid-insoluble ash standard of 12 per cent would appear to be suitable for this product.—J. Am. Pharm. Assoc. 1919, v. 8, p. 727–728.

Alsberg, Carl L., et al.: Within the past two years there have been increased offerings of *Hyoscyamus muticus* which, although unsuitable for use as a substitute for *Hyoscyamus niger*, appear to have considerable commercial value. This species does not contain scopolamine.—J. Am. Pharm. Assoc. 1919, v. 8, p. 467.

Nakao, M.: Manchurian henbane seeds are found to contain 16.19 per cent of fatty substances and less than 0.1 per cent of hyoscyamine. The seeds collected from the wild plant contained about 0.025 per cent of scopolamine instead of hyoscyamine, and only 15.11 per cent of fatty substances.—J. Pharm. Soc. Japan, 1919, No. 450, p. 677–687.

HYPOPHYSIS SICCA.

Jackson, D. E., and Mills, C. A.: The true active principle of the posterior portion of the pituitary gland is found to be a simple body of the sympathomimetic amine type, which produces in the dog contraction of the uterus, but not of the bronchi. Certain commercial preparations apparently contain very small and variable proportions of histamine, but histamine is not a necessary constituent of common preparations.—J. Lab. & Clin. Med. 1919, v. 5, p. 1–27.

Abel, J. J., and Kubota, S.: As a result of extensive investigations, it is concluded that the plain muscle-stimulating and depressor constituent of the posterior lobe of the pituitary gland is identical with histamine.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 243–300.

Cow, Douglas: From experiments, it is concluded that the hypothesis advanced by Abel and Kubota, that the plain muscle-stimulating principles of histamine and pituitary extract are identical, is incorrect.—J. Pharmacol. & Exper. Therap. 1919, v. 14, p. 275–277; see also John J. Abel and D. I. Macht, ibid. p. 279–293.

MacArthur, C. G.: The methods of Koch and Voegtlin, simplified, are applied to the determination of the composition of pituitary tissues. Analyses of the ox pituitary are given showing proteins, lipoids, extractive, etc.—J. Am. Chem. Soc. 1919, v. 41, p. 1225–1240.

Leschke, E.: The isolation of a crystalline substance from the posterior lobe of the pituitary body is reported.—Biochem. Ztschr. 1919, v. 96, p. 50.

Dudley, Harold Ward: Some observations on the active principles of the pituitary gland. A method of preparing crystalline residues, very active physiologically, from extracts of the posterior lobe is described.—J. Pharmacol. & Exper. Therap. 1919, v. 14, p. 295-312.

ICHTHYOL (NONOFFICIAL).

Hommell, P. E.: Ichthyol is of value in dermatological practice, also internally as an alterative, yet no preparations of the drug appear in the U. S. P. or N. F. It is largely prescribed in ointment, tampon, and suppository form. Dependable and standard formulas are, therefore, in order, having in view the proper base and method of deodorizing, and for internal use a palatable form of administration.—Proc. New Jersey Pharm. Assoc. 1919, p. 41.

Scheibler, Helmuth: Ichthyol oils. III. An investigation of the chemical constituents of the bituminous tar oils rich in sulphur.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 1902-1910.

Espín, L.: A report of 6 cases of urticaria in which marked improvement followed the administration of ichthyol.—Revista Médica Cubana, Havana, 1919, v. 30, p. 65, through J. Am. M. Assoc. 1919, v. 73, p. 800–801.

INFUSA.

O'Connor, D. Charles: A discourse on the preparation of infusions, including formulas for a number of preparations of this nature.—Spatula, 1919, v. 26, p. 91–94.

INFUSUM DIGITALIS.

Hommell, P. E.: It is the author's belief that it was a mistake to omit from the present formula for infusion of digitalis the 10 per cent of alcohol formerly directed, as it is thought that the presence of alcohol increases the activity of the diuretic principles, "gitalin, digito saponin," and other constituents existing in the infusion, besides, alcohol by stimulative action promotes the absorption of the drug in the system.—Proc. New Jersey Pharm. Assoc. 1919, p. 41.

INULA, N. F.

Editorial: A description of inula, with notes on its medicinal uses.—Eclectic M. J. 1919, v. 79, p. 660–661.

INUNCTUM MENTHOLIS, N. F.

Hommell, P. E.: The formula for menthol inunction is unnecessary, as the compound menthol inunction is of greater therapeutic value and has a considerable wider range of usefulness.—Proc New Jersey Pharm. Assoc. 1919, p. 42.

IODOFORMUM.

Cornmanducci and Meduri: A study of the effect of sunlight on iodoform dissolved in different solvents. In solutions of ethyl alcohol aldehyde is formed, but in methyl alcohol this does not take place.—Chem. Zentralb. 1919, v. 1, p. 347.

Gutmann: A study of the action of alkaline reducing agents on iodoform. The reducing agents studied were arsenites, antimonites, and stannites.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 212–215.

Springer, Karl: A 10 per cent mixture of iodoform powder with animal charcoal has been found valuable in the treatment of wounds.—Münch. med. Wchnschr. 1917, v. 64, p. 164–165, through Chem. Zentralbl. 1919, v. 1, p. 123.

Anon.: A method for the sterilization of iodoform intended for use in the making of iodoform paste and similar preparations is described.—Pharm. J. Lond. 1919, v. 102, p. 12.

Anon.: Out of a total of 135 samples of iodoform examined only 3 were rejected. These contained 0 2, 0.4, and 1.3 per cent, respectively, of mineral matter.—Evans' An. Notes, 1919, p. 61.

IODUM.

Doherty, W.: Data showing the value of various seaweeds as a source of iodine are presented.—Chem. Eng. Mining Rev. Australia, 1918, v. 11, p. 53, through Chem. Abstr. 1919, v. 13, p. 364.

Findlay, Dorothy F.: An account of the manufacture of iodine from seaweeds in eastern Siberia.—Pharm. J. Lond. 1919, v. 102, p. 33.

Schoorl, N., and Regenbogen, A.: Data showing the solubility of iodine in alcohol and water mixtures are presented in the form of tables and curves. The influence of potassium iodide on the solubility is also shown.—Pharm. Weekblad, 1919, v. 56, p. 538–545.

Clark, A. H.: From experiments it is concluded that iodine is soluble in liquid paraffin to the extent of 1.4 per cent at ordinary temperatures.—Rep. Chem. Lab. Am. M. Assoc. 1919, v. 12, p. 21–23.

Kolthoff, I. M.: Iodometric studies. VI. A study of the reaction of thiosulphate with iodine.—Pharm. Weekblad, 1919, v. 56, p. 572–585.

Winterstein, E.: A note on the detection of iodine in plants. The test depends upon the red color imparted in chloroform when the iodine is extracted with nitrosylsulphuric acid.—Ztschr. physiol. Chem. v. 103, p. 54–58, through Apoth.-Ztg. 1919, v. 34, p. 109.

Swingle, W. W.: A comparative study of the physiological action of iodine and thyroid gland.—J. Exper. Zoology, 1919, v. 27, p. 397–417, through Chem. Abstr. 1919, v. 13, p. 877.

IPECACUANHA.

Alsberg, Carl L., et al.: The increased demand for ipecac has resulted in the offering of quite a number of other materials under this label. Among these are *Heteropteris pauciflora* Juss., *Ipecacuanha fibrosa* and *Ionidium* species.—J. Am. Pharm. Assoc. 1919, v. 8, p. 470.

Roberts, J. G.: The only shipment of ipecac root examined contained 2.36 per cent ether-soluble alkaloids which is well above the U. S. P. standard of 1.75 per cent. It also contained about 3.5 per cent of stems.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 86: J. Am. Pharm. Assoc. 1919, v. 8, p. 672.

Ewe, G.: One lot of ipecac from Honduras examined assayed only 0.012 per cent emetine and 0.029 per cent total alkaloids.—J. Am. Pharm. Assoc. 1919, v. 8, p. 672.

IRIS, N. F.

Anselmino, O.: Data showing the ash content of iris powder of different degrees of fineness are presented. The ash content of the entire drug is given as 2 per cent.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 120.

Anon.: The Bureau of Chemistry reports that examination of importations of " orris root fingers " showed, in some instances, infection with molds, which affected even the inner tissues.—S. R. A. Chem. 1918, No. 23, p. 99.

IRIS VERSICOLOR, N. F.

Editorial: A description of iris, or blue flag, with notes on its therapeutic properties.—Eclectic M. J. 1919, v. 79, p. 328–329.

Farwell, Oliver Atkins: The blue flag of commerce, during the last 25 years, is stated to have consisted chiefly of the rhizomes of *Iris caroliniana* Watson. The macroscopic and microscopic characteristics of the latter as well as of the official species are described.—Bull. Pharm. 1919, v. 33, p. 475.

JALAPA.

Farwell, O. A.: Botanical and pharmacognostical descriptions are given of the market supplies of *Piptostegia pisonis*, *Resina drastica* and *Ipomoea orizabensis.* The plant from which Brazilian jalap is derived should be named *Operculina macrocarpa* L.—J. Am. Pharm. Assoc. 1918, v. 7, p. 852–855; see also C. O. Ewing and J. F. Clevenger, ibid. p. 855–858.

Alsberg, Carl L., et al.: A very interesting product which has lately appeared on the market is piptostegia root (*Piptostegia pisonis* Mart.), sometimes called "Brazilian jalap." The material contains up to 20 per cent, or more, of an active purgative resin which, however, is not identical with the resin obtained from true jalap.—J. Am. Pharm. Assoc. 1919, v. 8, p. 467.

Stanford, Ernest E., and Ewing, C. O.: An investigation of the resin of man-root (*Ipomoea pandurata* L.), with notes on two other convolvulaceous resins.—J. Am. Pharm. Assoc. 1919, v. 8, p. 789–795.

Anon.: There is a scarcity of jalap and sarsaparilla root owing to the revolutionary conditions in parts of Mexico, laborers being unable to work in the interior. Most of the jalap and sarsaparilla root come from Cordova and Jalapa in the State of Vera Cruz, where the rebels are in complete control of the surrounding country.—Drug. & Chem. Markets, 1919, v. 5, No. 67, p. 26.

Éwe, G.: Two samples of jalap examined were of U. S. P. quality.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

JUGLANS, N. F.

Farwell, O. A.: The family name, *Juglandaceæ*, should give way to the older family name of *Nuculaceæ.*—Drug. Circ. 1919, v. 63, p. 49.

Éwe, G.: One lot of butternut bark examined contained 30 per cent of wood.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 84.

KAOLINUM, N. F.

Odén, Sven: Studies on clays. I. A general introduction to the chemistry and physical chemistry of clays.—Bull. Geol. Inst. Univ. Upsala, 1916, v. 15, p. 175–194, through Chem. Abstr. 1919, v. 13, p. 1198.

Somers, R. E.: A report on the microscopic examination of clays. Clays of all kinds from all parts of the United States were examined.—J. Washington Acad. Sci. 1919, v. 9, p. 113–126.

Sollmann, Torald: Kaolin, used as a dusting powder, is found to absorb 73 per cent of its weight of water.—J. Am. M. Assoc. 1919, v. 72, p. 935–936.

Hamor, W. A., and Gill, H. E.: Extraction of clay with organic solvents, such as alcohol, acetone, carbon tetrachloride, or benzene, causes a decrease in plasticity.—J. Am. Ceram. Soc. 1919, v. 2, p 594–601.

Éwe, Geo. E.: Several analyses of potter's clay offered for pharmaceutical purposes are reported. Analyses of fullers' earth and terra alba are also reported.—Am. J. Pharm. 1919, v. 91, p. 795–798.

Kolthoff, I. M.: A study of various adsorbents for the purpose of determining their medicinal value as revealed by their adsorptive powers.—Pharm. Weekblad, 1919, v. 56, p. 207–225, 237–258.

KAVA, N. F.

Murakami, S.: The following new constituents have been isolated from kava root: Desmethoxy-yangonin, β-methistinic acid and kavic acid.—J. Pharm. Soc. Japan, 1919, No. 438, p. 563.

KINO.

Lipman, L. J.: Six lots of kino examined assayed 37.8 per cent, 40.6 per cent, 45.5 per cent, 62.7 per cent, 91.5 per cent, and 93.6 per cent of alcohol-soluble matter, respectively. The U. S. P. requires not less than 45 per cent.—J. Am. Pharm. Assoc. 1919, v. 8, p. 673.

KOLA, N. F.

van den Berg, L. M.: Recommendations are made for standardizing the Ph. Ndl. methods of analysis for the crude drug and medicinals prepared from kola.—Pharm. Weekblad, 1919, v. 56, p. 1124–1134.

Roberts, J. G.: Every lot of kola nut examined was of good quality and assayed from 1.5 per cent to 2.04 per cent of caffeine.—J. Am. Pharm. Assoc. 1919, v. 8, p. 673.

Éwe, G.: Of 16 samples of dried kola nuts examined 3 were below standard.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

KRAMERIA, N. F.

Anon.: The extreme limits found for the ash of the samples of krameria root examined were 1.5 and 3.4 per cent.—Evans' An. Notes, 1919, p. 61.

LAC VACCINUM, N. F.

Guillaume, A.: A study of the variations in the chemical composition of cow's milk. The major variant of the gross constituents of cow's milk was found to be fat.—Bull. sc. pharmacol. 1919, v. 26, p. 358–363.

Harris, L. J.: A table is given showing percentages of solids, not fat, in fat-free milk and in milk of minimum standard composition corresponding with percentages of added water.—Analyst (The), London, 1919, v. 44, p. 43–45; see also Richmond H. Droop, ibid. p. 200–201.

Perriraz, J.: The results of experiments show a small quantity of a reducing enzyme in milk. At the beginning of milking the enzyme is almost absent, while toward the end it increases greatly. Boiling causes the enzyme to disappear completely.—Arch. Sci. Phys. et Natur. 1918, v. 46, p. 101–102; Bull. Agric. Intell. 1918, v. 9, p. 1250–1251, through J. Soc. Chem. Ind. 1919, v. 38, p. 88A.

Terry, Robert W.: Data showing the potential acidity of milk are given, and a standard method for the determination of the acidity is described.—J. Am. Pharm. Assoc. 1919, v. 8, p. 538–547.

Mayer, Joseph L.: The volumetric determination of sugar in milk by means of Benedict's solution is described.—Proc. New York Pharm. Assoc. 1919, p. 236–238; J. Am. Pharm. Assoc. 1919, v. 8, p. 551–553.

Miura, S.: A method for the determination of lactose in milk. Protein is removed by mercuric chloride, or by phosphotungstic acid plus sodium chloride and hydrochloric acid, and the lactose is determined in the filtrate by the Bertrand's method.—Acta Schol. Med. Kyoto, 1918, v. 2, p. 413–423, through Physiol. Abstr. 1919, v. 4, p. 32.

Grimmer and Urbschat, E.: The determination of milk sugar in cow's and goat's milk by a modified Ritthausen method is described. The milk is deproteinized by means of $Fe(OH)_3$ instead of $CuSO_4$.—Biedermann's Zentr. 1918, v. 47, p. 222–223, through Chem. Abstr. 1919, v. 13, p. 345.

Meillere, G.: Notes on the determination of butter fat in milk by the method of A. Adam.—J. pharm. et chim. 1919, v. 20, p. 150–156.

Bailey, D. E.: An investigation of the Babcock test for butter fat in milk. The best results are obtained when the correct amount of acid of a specific gravity not less than 1.82 is added at 70° F. or below.—J. Dairy Sci. 1919, v. 2, p. 331–373.

Prescher, J.: The use of methyl alcohol in place of ethyl alcohol in the Rose-Gottlieb method for determining fat in milk, etc., is not recommended, owing to the imperfect separation of the ethereal and aqueous layers of liquid obtained in the process.—Ztschr. Unters. Nahr.- u. Genussm. 1918, v. 38, p. 286–287, through J .Soc. Chem. Ind. 1919, v. 38, p. 384A.

de Vries, J. J. O.: A discussion of a mathematical formula for the calculation of the dry matter of milk from the fat content and specific gravity.—Chem. Abstr. 1919, v. 13, p. 486.

Giribaldo, D., and Peluffo, A.: Comments on Höyberg's new formula for calculating the fat-free dry substance of milk.—Ztschr. Unters. Nahr.- u. Genussm. 1919, v. 38, p. 207–210.

Denis, W., and Minot, A. S.: A study of methods for the quantitative determination of the nonprotein nitrogenous constituents of milk.—J. Biol. Chem. 1919, v. 37, p. 353–366.

Violle, H.: Evidence is given to show that the peroxidase test is not suitable for distinguishing between fresh and heated milk.—Compt. rend. acad. sc. 1919, v. 169, p. 248–250, through J. Soc. Chem. Ind. 1919, v. 38, v. p. 693A.

Frost, William J., and Moore, Genevieve, D.: A report on the cellular test for pasteurized milk carried out under practical conditions. The test gave results 96 per cent perfect.—J. Dairy Sci. 1919, v. 2, p. 189–196.

de Vries, J. J. O.: A report of an investigation of the boiling test for milk.—Biedermann's Zentr. 1918, v. 47, p. 377–379, through Chem. Abstr. 1919, v. 13, p. 1502.

Ottiker, A.: A discussion of the importance of fat-free and sugar-free total solids in judging the quality of milk.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 141–144.

Baker, John C., and Van Slyke, Lucius L.: A method for the preliminary detection of abnormal milk is based on the use of the dye, dibromo-o-cresolsulphonphthalein, or bromocresol purple. Normal, fresh milk gives a grayish-blue color with the reagent.—J. Biol. Chem. 1919, v. 40, p. 357–371.

Coste, J. H., and Shelbourn, E. T.: From the electrical conductivity measurements of 200 samples of milk, it is concluded that the specific conductivity is not sufficiently well defined to determine added water by this means.—Analyst (The), London, 1919, v. 44, p. 158–164.

Harris, L. J.: A discussion of the application of formulas for added water in milk when the addition is made to a milk of minimum standard after an accumulation of fat.—Analyst (The), London, 1919, v. 44, p. 317–318.

Kunz, Rudolf: A description of a method for the determination of citric acid in milk.—Arch. f. Chemie u. Mikroskopie, 1915, No. 4, through Chem. Zentralbl. 1919, v. 2, p. 280.

Van Slyke, L. L., and Baker, J. C.: Data relative to the determination of carbon dioxide and carbonates in cow's milk are given.—Tech. Bull. No. 69, N. Y. Agric. Exper. Sta. 1919, p. 1–9.

Kufferath, H.: The defects in the Trommsdorff tube for determining leucocytes in milk are pointed out, and an improved form, which is simple in construction and capable of greater accuracy is described.—Ann. inst. Pasteur, 1919, v. 33, p. 420–424.

Mohorcic, H.: An investigation of the behavior of various substances when used as preservatives of milk.—J. Soc. Chem. Ind. 1919, v. 38, p. 50A.

Daniels, A. L., and English, H.: A simple method for modifying the fat content of milk for infant feeding is described.—Am. J. Dis. Children, 1919, v. 17, p. 212–217.

Weehuizen, F.: Notes on the adulteration of milk with "santen" and with condensed milk. "Santen" is an emulsion of coconut oil in water.—Pharm. Weekblad, 1919, v. 56, p. 303–305.

Hart, E. B., et al.: Heat destroys the antiscorbutic properties of milk. Raw milk sterilized at 120° for 10 minutes will not prevent scurvy in guinea pigs.—J. Biol. Chem. 1919, v. 38, p. 305–324.

LEPTANDRA, N. F.

Editorial: A description of leptandra, with notes on its use as a remedial agent.—Eclectic M. J. 1919, v. 79, p. 452–453.

LINIMENTA.

Thum, John K.: A formula for the preparation of calamine liniment is given.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 270–271.

LINIMENTUM AMMONIÆ.

Hommell, P. E.: The formula for liniment of ammonia has been changed several times on account of imperfect saponification. While oil of benne is generally conceded as satisfactory, yet, if lard oil could be obtained pure, it would yield even a better emulsion—Proc. New Jersey Pharm. Assoc. 1919, p. 41.

LINIMENTUM CALCIS.

Kyser, E. V.: It is recommended that soya bean oil be substituted for linseed oil in the preparation of lime liniment.—J. Am. Pharm. Assoc. 1919, v. 8, p. 815.

LINIMENTUM CAMPHORÆ.

Hommell, P. E.: The cottonseed oil in liniment of camphor should be discarded because the drying properties of this oil, especially the unpurified kind, give rise to gummy and resinous effects where it is applied. The present liniment is certainly deficient in emollient and penetrating action, and physicians are constantly disappointed with its formula. Benne oil has been suggested as a satisfactory substitute for cottonseed oil in this liniment. The author favors the use of olive or peanut oil.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

Cabannes, E.: A description of a method for the preparation of sterile camphorated oil for hypodermic injection.—Bull. soc. pharm. Bordeaux, 1919, v. 57, p. 158–160.

Lunde: The administration of camphorated oil by hypodermic injection is stated to be a most valuable method for arresting pulmonary and other forms of hemorrhage.—Bull. gen. therap. 1919, v. 170, p. 650.

Mook, W. H., and Wander, W. G.: A number of cases in which tumors have resulted from the injection of camphorated oil are reported.—J. Am. M. Assoc. 1919, v. 73, p. 1340–1341.

Jongwald, Mattys: Of 14 samples of camphorated oil analyzed, the camphor content ranged from 11.12 to 22 per cent. The U. S. P. allows not less than 19.5 nor more than 20.5 per cent.—Proc. North Dakota Pharm. Assoc. 1919, p. 57.

Anon.: A sample of camphorated oil examined was found to contain 7.2 grams of camphor per 100 grams of camphorated oil, whereas the Pharmacopœia provides that it shall contain not less than 19.5 grams nor more than 20.5 grams of camphor per 100 grams.—S. R. A. Chem. Suppl. 1919, No. 60, p. 536.

Table showing some of the analytical results reported for camphor liniment.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Schaefer, Hugo	50	18	Proc. New Jersey Pharm. Assoc. 1919, p. 102–104.
Anonymous	5	1	Bull. Vermont Bd. Health, 1919, v. 19, No. 3 and 4; v. 20, No. 1.
Anonymous	6	6	Bull. Massachusetts Bd. Health, 1919, v. 6, p. 87, 127.
Bachman, Gustave	6	3	Proc. Minnesota Pharm. Assoc. 1919, p. 136.

LINIMENTUM CHLOROFORMI.

Kyser, E. V.: It is recommended that a soap liniment prepared according to the author's formula be substituted for the official soap liniment in the preparation of chloroform liniment.—J. Am. Pharm. Assoc. 1919, v. 8, p. 815.

Éwe, George E.: An investigation revealed the fact that chloroform liniment loses chloroform at the following rate by spontaneous evaporation: 14 per cent in 5 days; 33 per cent in 10 days. A simple distillation method for the estimation of the chloroform content is described.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 176–177.

Anon.: Data obtained by the Bureau of Chemistry in the analysis of adulterated or misbranded samples of chloroform liniment are reported.—S. R. A. Chem. Suppl. 1919, No. 58, p. 437–438, 451–452, 459, 464; No. 59, p. 447, 489–490; No. 60, p. 552–555, 571–573.

LINIMENTUM SAPONIS.

Jordan, F. M.: A modification of the U. S. P. process for the preparation of soap liniment is described. Instead of using castile soap, a soap made by a cold process is employed. This eliminates difficulties experienced in obtaining complete solution of the soap.—Am. J. Pharm. 1919, v. 91, p. 84; Pacific Pharm. 1919, v. 12, p. 305.

Kyser, E. V.: It is recommended that the dried soap in soap liniment be replaced by 120 grams of soft soap prepared according to the author's method.—J. Am. Pharm. Assoc. 1919, v. 8, p. 815.

Anon.: Data obtained in the analysis of different samples of soap liniment are reported by the Bureau of Chemistry.—S. R. A. Chem. 1919, No. 60, p. 552–555.

LINIMENTUM SAPONIS MOLLIS.

Hommell, P. E.: The present liniment of soft soap is not as effective as the preparation formerly official, on account of the use of cottonseed oil in the preparation of soft soap.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

Jordan, F. M.: The cold process for the preparation of soaps in the manufacture of tincture of green soap, soap liniment, and compound solution of cresol is described.—Pacific Pharm. 1919, v. 12, p. 304; Canadian Pharm. J. 1919, v. 52, p. 350.

van Os, D.: Notes on the choice of an oil for the preparation of liniment of soft soap. From experiments it is concluded that olive oil is best suited for this purpose.—Pharm. Weekblad, 1919, v. 56, p. 767–769.

Kyser, E. V.: It is recommended that a sodium soap prepared according to the author's formula be substituted for the soft soap of the U. S. P. in the preparation of the liniment.—J. Am. Pharm. Assoc. 1919, v. 8, p. 815.

LINIMENTUM SINAPIS COMPOSITUM, N. F.

Hommell, P. E.: It is suggested that compound mustard liniment should be rendered milder by the exclusion of mezereon, since painful sores invariably result unless care is taken in using this powerful dermal irritant.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

LINIMENTUM TEREBINTHINÆ.

Hommell, P. E.: Liniment of turpentine should be placed in the N. F. Decades ago it was considerably exhibited as a counterirritant, but today it is almost obsolete.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

LINIMENTUM TIGLII COMPOSITUM, N. F.

Hommell, P. E.: Compound liniment of Croton oil has far more therapeutic value than the liniment containing cajuput.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

LIQUORES.

Duret, Paul: A formula for a stable aqueous solution of dissociable calomel for injection is given and its method of preparation is described.—Ann. inst. Pasteur, 1919, v. 33, p. 181–183.

Léger, E.: Notes on the preparation of solution of benzoate of mercury suitable for injection.—J. pharm. et chim. 1919, v. 20, p. 145–146.

Goris, A.: Analytical data relative to the preparation of solutions of iodo-tannin from the extracts of drugs containing tannin.—Bull. sc. pharmacol. 1919, v. 26, p. 305–312.

Heffter, A.: An investigation of the stability of sterilized solutions of medicaments in ampoules. Solutions of caffeine sodiosalicylate did not deteriorate within ten months. Solutions of strophanthin maintained their activity unimpaired for a period of 13 months.—Ber. pharm. Gesellsch. 1919, v. 29, p. 142–146.

Elphinstone, J. H.: Stock solutions of novocaine—adrenaline may be preserved by the addition of chloroform containing a trace of hydrochloric acid.—Dental Cosmos, 1919, v. 61, p. 675.

van Itallie, I. E.: Data showing the amount of sodium chloride necessary for the preparation of isotonic solutions containing varying quantities of the different alkaloids are given.—Pharm. Weekblad, 1918, v. 55, p. 202–208; Pharm. J. Lond. 1919, v. 102, p. 219.

Bradley, Theodore et al.: A symposium on the subject of percentage solutions. An attempt is made to determine what a physician means when he prescribes a percentage solution of a chemical, and the manner of dispensing the same.—Drug. Circ. 1919, v. 63, p. 361–364, 384.

Scoville, Wilbur L.: A paper discussing the preparation of percentage solutions.—Bull. Pharm. 1919, v. 33, p. 114–115.

O'Connor, D. C.: Methods for computing percentage strengths of solutions are described in detail.—Spatula, 1919, v. 25, p. 133–134.

LIQUOR ACIDI ARSENOSI.

Langenhan, H. A.: A short history of the official solution of arsenous acid.—J. Am. Pharm. Assoc. 1919, v. 8, p. 189.

Hommell, P. E.: Solution of arsenous acid should be deleted from the U. S. P., as physicians usually prescribe other forms of arsenic.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

Crouzel, Ed.: It is contended that the solution of arsenous acid is not fit for internal medication because of the corrosive action on the mucous membranes. It is suggested that it be replaced by sodium cacodylate, sodium arsenate, disodium methylarsinate, or potassium arsenite when the internal administration of arsenic is indicated.—Répert. Pharm. 1919, v. 30, p. 194–195.

LIQUOR ALUMINI ACETATIS, N. F.

Rustung, G.: Attention is directed to the fact that the stability of the solution of aluminum acetate is dependent to a large extent upon the water content of the aluminum sulphate used in its preparation. The use of pure calcium carbonate is also of importance in this connection.—Apoth.-Ztg. 1918, v. 33, p. 444, through Pharm. Zentralh. 1919, v. 60, p. 70.

Zawalkiewicz, Z.: A reply to Helch. The author has recommended his ammonium oxalate reaction for the identification of the solution of aluminum acetate and has found that it does not yield incorrect results as claimed by Helch.—Pharm. Post, 1918, v. 51, p. 657, through Chem. Zentralbl. 1919, v. 2, p. 134.

Zimmerman, Walther: A sample of solution of aluminum acetate examined contained 0.008 per cent iron.—Apoth.-Ztg. 1919, v. 34, p. 14.

LIQUOR ALUMINI SUBACETATIS, N. F.

Scoville, Wilbur L.: Solution of aluminum subacetate is directed to be adjusted to a definite specific gravity. Adjustment to a definite volume, with a descriptive clause would be more desirable.—J. Am. Pharm. Assoc. 1919, v. 8, p. 745.

LIQUOR AMMONII ACETATIS.

Goldby, F.: The author prepares a solution of ammonium acetate eight times the Ph. Brit. strength by mixing in an open vessel 433.5 cubic centimeters of 95 per cent acetic acid, 400 grams of ammonium carbonate and about 382 cubic centimeters of water.—Pharm. J. Lond. 1919, v. 102, p. 159.

Cowley, R. C.: A note on the preparation of the concentrated solution of ammonium acetate of the Ph. Brit. The accuracy of the quantities of ammonium carbonate and acetic acid directed to be used is discussed.—Pharm. J. Lond. 1919, v. 103, p. 215–216.

LIQUOR ANTISEPTICUS ALKALINUS, N. F.

Anon.: The use of the following solution of oils is recommended in the preparation of alkaline antiseptic solution: Thymol, 4 gms.; eucalyptol, 4 cc.; oil of peppermint, 4 cc.; methyl salicylate, 8 cc.; alcohol, enough to make 300 cc.—J. Am. Pharm. Assoc. 1919, v. 8, p. 294.

LIQUOR ARSENI ET HYDRARGYRI IODIDI.

Langenhan, H. A.: A short history of Donovan's solution.—J. Am. Pharm. Assoc. 1919, v. 8, p. 189.

Crouzel, Ed.: In order to improve the keeping qualities of Donovan's solution, the author proposes substituting sodium cacodylate and potassium iodide for arsenic iodide in the original formula. A solution prepared in this manner is stated to be very stable and less toxic than the original Donovan's solution.—J. pharm. et chim. 1919, v. 19, p. 129–130.

Waldbott, Sigmund: The U. S. P. assay of Donovan's solution is stated to give results for mercuric iodide which are far too low. A simple and more accurate method is proposed. An abstract.—Science, 1919, v. 50, p. 442.

LIQUOR BISMUTHI, N. F.

Tallantyre, S. B.: A note on the determination of bismuth in pharmaceutical preparations by the formaldehyde process. The essentials of the process are that the bismuth preparation after a preliminary decomposition with hydrochloric acid is reduced by excess of formaldehyde and sodium hydroxide to a very easily manipulated coagulated mass of metallic bismuth.—Pharm. J. Lond. 1919, v. 103, p. 81.

LIQUOR CALCIS.

Hommell, P. E.: Solution of calcium hydroxide is one of the most important products of the U. S. P., yet it is often found below the legal standard, due chiefly to carelessness. The author claims that there can be no deterioration possible if the fluid is prepared strictly according to the U. S. P. and properly stored.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

Terry, Robert W.: Notes on the preparation and analysis of lime water and lime-water tablets.—J. Am. Pharm. Assoc. 1919, v. 8, p. 473–478.

LIQUOR CHLORI COMPOSITUS, N. F.

Wende, E.: The substitution of a solution of chlorine prepared by the action of hydrochloric acid on potassium chlorate for chlorine water of the Ph. Germ. is recommended.—Apoth.-Ztg. 1919, v. 34, p. 95–96.

Ebert: A solution of sodium hypochlorite to which a few drops of acid are added is recommended as a substitute for chlorine water.—Pharm. Zentralh. 1919, v. 60, p. 157.

LIQUOR CRESOLIS COMPOSITUS.

Jordan, F. M.: A modification of the U. S. P. process for the preparation of the compound solution of cresol is described. The U. S. P. process is criticized with respect to the excess of alkali which it contains and the alcohol in the formula is stated to be unnecessary.—Am. J. Pharm. 1919, v. 91, p. 85.

Hilton, S. L.: A suggested formula for the preparation of compound cresol solution contains oleic acid in place of linseed oil. The preparation made according to this formula is stated to be superior to that of the U. S. P.—J. Am. Pharm. Assoc. 1919, v. 8, p. 759.

Davies, W. W.: In view of the scarcity of linseed oil, it is suggested that either soy-bean oil or corn oil, or a mixture of the two, receive official recognition as a substitute for the linseed oil in the compound solution of cresol.—J. Am. Pharm. Assoc. 1919, v. 8, p. 98–99.

Kyser, E. V.: It is recommended that compound solution of cresol be made from equal parts by weight of soft soap and cresol. The solution made by this formula is stated to mix clear with water in any proportion.—J. Am. Pharm. Assoc. 1919, v. 8, p. 816.

Tathan, Guy T. P.: A chemical estimation of the disinfectant value of compound solution of cresol may be based upon its content of phenols and hydrocarbons. Weight for weight, the germicidal value of phenols is to that of hydrocarbons as 10:3.—J. Roy. Army Med. Corps, 1919, v. 32, p. 227–228.

Schmatolla, O.: A description of a method for the testing of compound solution of cresol. The method consists in salting out the saponified cresol with sodium chloride solution and hydrochloric acid, shaking out with a measured amount of benzene and measuring the volume of the solution thus obtained.—Pharm. Ztg. 1919, v. 64, p. 670.

Bachman, Gustave: Two of 3 samples of compound solution of cresol examined solidified when placed in an open dish. This was found to be a rather reliable means of determining whether compound solution of cresol is made from KOH or NaOH. When the solution solidifies it is certain that NaOH has been used in its preparation.—Proc. Minnesota Pharm. Assoc. 1919, p. 136.

Ditthorn, Fritz: An investigation of the comparative value of some new substitutes for saponated solution of cresol.—Centralbl. f. Bakteriol. (Orig.), 1919, v. 82, p. 477–483.

LIQUOR FERRI ALBUMINATI, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for solution of albuminate of iron. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

Anon.: Gelatinized solution of iron albuminate which has separated into two layers may be restored to fluidity by the cautious addition of sodium hydroxide solution.—Pharm. Ztg. 1918, v. 63, p. 299, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 140.

LIQUOR FERRI CHLORIDI.

White, William R.: A sample of solution of ferric chloride labeled U. S. P. became turbid and a precipitate formed on the addition of alcohol. An examination of the solution showed the presence of oxychloride of iron and a deficiency of hydrochloric acid.—J. Am. Pharm. Assoc. 1919, v. 8, p. 558.

Funk, E.: A sample of solution of ferric chloride examined contained nitric acid and a considerable quantity of copper.—Zentralbl. f. Pharm. 1919, v. 15, p. 91, through Pharm. Zentralh. 1919, v. 60, p. 565.

LIQUOR FERRI HYPOPHOSPHITIS, N. F.

Scoville, Wilbur L.: Solution of ferric hypophosphite precipitates on standing. This can not be prevented by the addition of glycerin. Probably more sodium citrate is needed.—J. Am. Pharm. Assoc. 1919, v. 8, p. 745.

Hommell, P. E.: Solution of iron hypophosphite is seldom prescribed, as the syrup is preferred.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

LIQUOR FERRI OXYCHLORIDI, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for solution of iron oxychloride. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

LIQUOR FERRI PEPTONATI, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for solution of iron peptonate. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

Hommell, P. E.: Solution of iron peptonate is superior to the solution of iron and manganese, as manganese is of doubtful utility, therapeutically speaking.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

LIQUOR FERRI PROTOCHLORIDI, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for solution of iron protochloride. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

LIQUOR FORMALDEHYDI.

Hofmann, K. A.: A description of a method for preparing formaldehyde from zinc formate.—Ber. deutsch. chem. Gesellsch. 1918, v. 51, p. 1389–1419: Pharm. Weekblad, 1919, v. 56, p. 406.

Gradewitz, H.: A report of a study of the relationship between specific gravity and formaldehyde content of formaldehyde solutions.—Pharm. Ztg. 1918, p. 241, through Pharm. Weekblad, 1919, v. 56, p. 188.

Robinson, R. H.: The official method of the Association of Agricultural Chemists for the determination of formaldehyde in formaldehyde solutions has been found to give erroneous results due probably to the loss of formaldehyde upon heating. A procedure for overcoming this difficulty is described in detail.—Chem. Analyst, 1919, No. 29, p. 21–22.

Blank and Finkenheimer: A method for the determination of formaldehyde is based on the oxidation of the aldehyde to formic acid in alkaline solution, and the subsequent determination of the formic acid by a gravimetric method.—Pharm. Ztg. 1918, p. 409, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 36.

Stüwe: A volumetric method for the determination of formaldehyde and hexamethylenamine is described. The method is based on the reduction of mercuric chloride and the determination of the precipitated mercury by titration with N/10 thiosulphate solution.—Pharm. Centralb. 1918, p. 27, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 33.

Rossi, A.: Color reactions are obtained when a dilute solution of formaldehyde is added to a few cubic centimeters of sulphuric acid to which one of the following has been added: gallic acid, tannin, pyrogallol, salicylic acid, resorcinol, pyrocatecol, betanaphthol, benzonaphthol, salol, or phenolphthalein.—Boll. chim.-farm. 1919, v. 58, p. 265–270.

Mannich, C.: By keeping a 30 per cent aqueous solution of formaldehyde (almost free from methyl alcohol) containing 1 to 4 per cent of anhydrous sodium carbonate, 0.3 per cent of sodium hydroxide or 0.3 per cent of lime for four months, crystals of α-polyoxymethylene were obtained.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 160–162.

Sallinger, H.: Evidence is given to show that formaldehyde is enzymatically indifferent to starch.—Ber. deutsch. chem. Gesellsch. 1919, v. 52, p. 651–656; J. Soc. Chem. Ind. 1919, v. 38, p. 433A.

Rustung, G.: A sample of formaldehyde solution examined was cloudy and contained polymerized aldehyde due to a deficiency in methyl alcohol content.—Norges Apoth. Tidsskr. 1919, v. 27, p. 41–53, through Apoth.-Ztg. 1919, v. 34, p. 122.

Roberts, J. G.: One lot of liquor formaldehyde was rejected, as it was thick and gelatinous. It undoubtedly contained considerable paraformaldehyde.—J. Am. Pharm. Assoc. 1919, v. 8, p. 754.

LIQUOR HYDROGENII DIOXIDI.

Freèe, J.: A review and discussion of the patented processes for the manufacture of hydrogen peroxide.—Rev. prod. chim. 1918, v. 21, p. 211–214, through Chem. Abstr. 1919, v. 13, p. 62.

Phragmén, G.: Notes on the catalytic decomposition of hydrogen peroxide.—Meddel. K. Vetensk. Akad. Nobelinst. 1919, v. 5, p. 13, through Exper. Sta. Record, 1919, v. 41, p. 409.

Kolthoff, I. M.: Notes on the preservation and evaluation of solutions of hydrogen peroxide. Rapid and accurate titration of hydrogen peroxide in acid solution is made possible by using as a catalyst 3 drops of normal ammonium molybdate solution for every 25 cubic centimeters of hydrogen peroxide solution.—Pharm. Weekblad, 1919, v. 56, p. 949–959.

Curtis, Harry A.: Experimental proof is presented to show that the oxidizing power of hydrogen peroxide, as manifested in the bleaching of dyes, is increased by exposing the reaction mixture to light of short wave lengths.—J. Am. Chem. Soc. 1919, v. 42, p. 720–724.

Ibañez, D. M.: Data relative to the amount of available oxygen in 7 samples of solution of hydrogen peroxide are given. The sulphuric acid content of these samples is also stated.—Farm. Españ. 1919, v. 51, p. 181–185.

Clay, Cassius L.: One of four samples of solution of hydrogen dioxide examined contained only 77.3 per cent of the required amount of H_2O_2. All samples contained acetanilid as a preservative.—Bull. Louisiana Bd. Health, 1919, v. 10, p. 193.

Zimmermann, Walther: A sample of solution of hydrogen peroxide examined left a residue of 0.175 per cent on evaporation instead of 0.1 per cent as required by the Ph. Germ.—Apoth.-Ztg. 1919, v. 34, p. 14.

Clay, Cassius L.: Of 16 samples of solution of hydrogen peroxide examined, 4 did not comply with the U. S. P requirements.—Bull. Louisiana Bd. Health, 1919, v. 10, p. 91.

Scofield, Walter W.: Of 29 samples of solution of hydrogen dioxide examined, 21 were rejected.—Rep. New Jersey Dept. Health, 1919, p. 85.

LIQUOR HYPOPHOSPHITUM, N. F.

Hommell, P. E.: Solution of hypophosphites is a nonsaccharine preparation of great value in imperfect metabolism and neuresthenia.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

LIQUOR HYPOPHYSIS.

Hamilton, Herbert C.: Attention is called to the fact that laboratory experiments have shown in every case that alcohol in the quantity present in pituitary extract does not affect the activity of this preparation unfavorably.—Pacific Pharm. 1919, v. 12, p. 235.

Dudley, Harold W.: The active principles of the pituitary gland. A method is described for preparing crystalline residues, very active physiologically, from extracts of the posterior lobe of the pituitary gland.—J. Pharmacol. & Exper. Therap, 1919, v. 14, p. 295–312.

Houssay, B. A.: Hypophysis extract is found to be a bronchoconstrictor and to act antagonistically to adrenaline in all cases.—Physiol. Abstr. 1919, v. 3, p. 386.

Schwaab: Notes on the use of pituitary extract in obstetrics.—Presse Médicale, 1919, v. 27, p. 299–300.

LIQUOR MAGNESII CITRATIS.

Lampa, Robert R.: A formula for solution of magnesium citrate which will furnish a product less prone to precipitate on standing should be devised.—Proc. New York Pharm. Assoc. 1919, p. 54.

Horn, Wilbur F.: A method for the preparation of solution of magnesium citrate dispenses with the use of potassium or sodium bicarbonate entirely and requires 7 grams of citric acid less for each bottle of solution.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 228–229.

Cordonnier, Ernest: Owing to the variation in the composition of the magnesium carbonate on the market, it is suggested that the magnesium carbonate used in the preparation of the solution of magnesium citrate be freshly prepared by precipitating a solution of the sulphate with sodium carbonate. Detailed directions for preparing the solution according to this method are given.—Union pharm. May 15, 1919, through Répert. Pharm. 1919, v. 30, p. 226–228; Farm. Españ. 1919, v. 51, p. 487–488, 502–503.

Hommell, P. E.: For charging solution of magnesia citrate, bicarbonate of soda only should be used, as it is more soluble than the potassium salt, has a lower molecular weight, and generates gas more rapidly. The present formula is a decided improvement over previous ones, but it is believed to be advantageous to direct that the bottle for this preparation be absolutely and completely sterilized instead of simply rinsing it with boiling water.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

Anon.: Data obtained by the Bureau of Chemistry in the analysis of a number of samples of solution of magnesium citrate are reported.—S. R. A. 1919, No. 58, p. 446; No. 59, p. 470–471, 489; No. 60, p. 571–573.

Table showing some of the analytical results reported for solution of magnesium citrate.

Reporters.	Number of samples—		References.
	Ex-amined.	Re-jected.	
Barnard, H. E.....	11	0	Bull. Indiana Bd. Health, 1919, v. 22, p. 100.
Clay, Cassius L.....	38	19	Bull. Louisiana Bd. Health, 1919, v. 10, p. 192-193.
Anonymous........	53	53	Bull. Massachusetts Bd. Health, 1919, v. 6, p. 87, 127, 178.
Bachman, Gustave.	10	3	Proc. Minnesota Pharm. Assoc. 1919, p. 133.
Scofield, Walter W.	47	23	Rep. New Jersey Dept. Health, 1919, p. 85–87.

LIQUOR PEPSINI, N. F.

Hommell, P. E.: Solution of pepsin, on account of its freedom from alcohol and aromatics, is superior as a digestant to the aromatic solution of pepsin.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

LIQUOR PEPSINI ANTISEPTICUS, N. F.

Hommell, P. E.: The dose of aromatic solution of pepsin is given as 2 drachms, while the dose of the antiseptic solution of pepsin is omitted. Why?—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

LIQUOR PHOSPHATUM COMPOSITUS, N. F.

Scoville, Wilbur L.: Compound solution of phosphates precipitates badly. Probably more acid is needed in its preparation.—J. Am. Pharm. Assoc. 1919, v. 8, p. 745.

LIQUOR PLUMBI SUBACETATIS.

Hommell, P. E.: Solution of lead subacetate and diluted solution of lead subacetate are seldom prescribed, as the lead and opium lotion of the N. F. is more satisfactory. They should, therefore, be placed in the N. F.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

Morris, R. L.: Modifications of the Ph. Brit. method for the determination of lead in the solution of lead subacetate are described.—Chem. & Drug. 1919, v. 91, No. 11, p. 52–54.

LIQUOR POTASSÆ CHLORINATÆ, N. F.

Fonzes-Diacon: Javelle water loses very little of its activity, during 4 months if stored in bottles of dark yellow glass, even when exposed to light. In clear bottles, the loss is very marked.—Bull. soc. chim. 1919, v. 25, p. 206–208; J. Soc. Chem. Ind. 1919, v. 38, p. 360A.

Diénert, F. and Wandenbulcke, F.: A report of an investigation of the action of sodium thiosulphate on hypochlorites with a view to ascertaining the amount of thiosulphate necessary to remove chlorine from javellized water.—Compt. rend. acad. sc. 1919, v. 169, p. 29–30.

LIQUOR POTASSII ARSENITIS.

Langenhan, H. A.: A short history of Fowler's solution.—J. Am. Pharm. Assoc. 1919, v. 8, p. 189.

Anon.: Notes on the time required to dissolve ingredients in preparing Fowler's solution. Ten grams of arsenic trioxide and 20 grams of potassium bicarbonate dissolved in 100 cubic centimeters of boiling water in about 15 minutes.—Drug. Circ. 1919, v. 63, p. 547–548.

Anon.: Of 2 samples of Fowler's solution examined, 1 did not answer the U. S. P. requirements.—Bull. Vermont Bd. Health, 1919, v. 19, No. 4; v. 20, No. 1.

Anon.: A report of a case of chronic arsenic poisoning. The patient had been taking a prescription containing Fowler's solution for 14 years.—Chem. & Drug. Australas. 1919, v. 34, p. 330.

LIQUOR SODÆ CHLORINATÆ.

Crowley, R. C.: The amount of Na_2CO_3 directed by the Ph. Brit. to be used in the preparation of the solution of chlorinated soda is insufficient to completely precipitate the CaO, and the use of a sufficient quantity for this purpose produces an excessive alkalinity. A procedure for avoiding these difficulties is described.—Chem. & Drug. 1919, v. 91, p. 49.

Ebert: The preparation of sodium hypochlorite solution. The use of sodium sulphate in place of sodium carbonate in the double decomposition of the calcium salt is recommended.—Pharm. Ztg. 1918, v. 63, p. 448, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 141.

Moerk, Frank X., and Foran, Ralph R.: It is suggested that the U. S. P. test for the assay of hypochlorite solutions be modified as follows: 1. That the prepared test be allowed to stand one hour before titrating; 2. That the quantity of glacial acetic acid be increased to 3 cubic centimeters for immediate titration or that it be replaced by diluted hydrochloric or sulphuric acid.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 276–277.

Justin-Miller, Ed.: Alkaline hypochlorites are combinations of salts having the formula XOCl and XCl, and the formula should, therefore, be written X_2OCl_2.—J. pharm. et chim. 1919, v. 20, p. 113.

Hart, E. J.: A method for the accurate preparation of eusol, a neutral solution of sodium hypochlorite, is described.—Pharm. J. Lond. 1919, v. 103, p. 535–536.

Benedict, Stanley R.: The preparation of Dakin's solution from liquid chlorine by the gravimetric method is described.—Surgery, Gynecology, and Obstetrics. 1918, v. 27, p. 386-387, through Chem. Abstr. 1919, v. 13, p. 1327.

Richter, Kurt: A study of the preparation and properties of Dakin's solution.—Apoth.-Ztg. 1917, v. 82, p. 83; Pharm. Ztg. 1919, v. 64, p. 40; Chem. Zentralbl. 1919, v. 2, p. 306.

Benedict, Stanley R.: A note on the preparation of Dakin's solution from liquid chlorine by the gravimetric method. Weighing the chlorine is said to be preferable to measuring its volume on account of greater accuracy.—Surgery, Gynecology, and Obstetrics, 1918, v. 27, p. 386–387, through Exper. Sta. Record, 1919, v. 40, p. 13.

Cullen, G. E., and Hubbard, R. S.: Factors of practical importance in the electrolytic preparation of Dakin's solution are described. The solution is best stabilized by adding 0.5 per cent of borax, or 0.5 to 1 per cent of a mixture of sodium carbonate or bicarbonate of p_H 10 to 9.5, or 0.2 per cent sodium hydroxide.—J. Biol. Chem. 1919, v. 37, p. 511–517, 519–523.

Overton, H. L.: Some practical notes on the preparation and preservation of Dakin's solution.—Pharm. J. Lond. 1919, v. 102, p. 368.

Richter, E.: Notes on the preservation of Dakin's solution. A 10 cubic centimeter sample preserved in a completely filled, sealed flask of brown glass required, after six months, 15 cubic centimeters of tenth normal sodium thiosulphate solution.—Apoth. Ztg. 1917, v. 32, p. 83, through Chem. Zentralbl. 1919, v. 2, p. 306.

Anon.: Notes on the preparation, properties, and rate of deterioration of Dakin's solution. Analytical data relative to the rate of deterioration are presented in tabular form.—Farm. Españ. 1919, v. 51, p. 455–456, 472–473.

Anon.: An additional note on the rate of deterioration of solutions containing sodium hypochlorite.—Rep. Chem. Lab. Am. M. Assoc. 1918, v. 11, p. 81–83.

Moerk, Frank X., and Foran, Ralph R.: A note on the assay of hypochlorite solutions, with special reference to Dakin's solution.—Am. J. Pharm. 1919, v. 91, p. 592–593.

Mestrezat, W.: The determination of free and carbonated alkali in pure solutions, or in the presence of alkaline hypochlorites. A polemical discussion of an article by Philibert.—J. pharm. et chim. 1919, v. 20, p. 9–14; see also reply by Philibert, ibid. p. 52–55.

Mestrezat, W.: The alkalinity of chlorinated solutions such as the Dakin and Daufresne solutions has the disadvantage of reducing by approximately one-half the germicidal action of chlorine. Several formulas for making solutions of this nature are discussed.—Compt. rend. soc. biol. 1918, v. 81, p. 91–93.

LIQUOR SODÆ ET MENTHÆ, N. F.

Hommell, P. E.: In solution of soda and mint, peppermint water should replace spearmint, which is sickening to many, and is less carminative in action.—Proc. New Jersey Pharm. Assoc. 1919. p. 46.

LIQUOR SODII BORATIS COMPOSITUS, N. F.

Clay, Cassius L.: Five of 13 samples of Dobell's solution examined were deficient in phenol content, containing only from 50 to 76 per cent of the required amount.—Bull. Louisiana Bd. Health, 1919, v. 10, p. 193.

LIQUOR STRYCHNINÆ ACETATIS, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for solution of strychnine acetate. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

LIQUOR ZINCI CHLORIDI.

Brocksmit: The use of zinc sulphate and barium chloride is recommended for the preparation of zinc chloride solution free from insoluble basic salts.—Pharm. Ztg. 1918, p. 608, through Schweiz. Apoth.-Ztg. 1919, v. 56, p. 142.

Hommell, P. E.: Solution of zinc chloride should have been disposed of long ago, as it is no longer used as a remedial agent, but chiefly as a disinfectant.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

LITHII SALICYCLAS, N. F.

Anon.: A reprint of the standards proposed for lithium salicylate by the Committee on Unofficial Standards.—J. Am. Pharm. Assoc. 1916, v. 5, p. 87.

LOBELIA.

Éwe, G.: All of ten samples of lobelia examined were found to be of U. S. P. quality.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

LUPULINUM, N. F.

Woellmer, W.: The crystalline bitter principles of hops are represented by the formulas $C_{21}H_{30}O_4$ or $C_{26}H_{30}O_5$. They owe their acid properties to the presence of hydroxyl groups and they are, therefore, appropriately termed "humulone" and "lupulone."—Chem. Abstr. 1919, v. 13, p. 495.

Lipman, L. J.: Nine lots of lupulin examined yielded ether-soluble matter ranging from 44.9 per cent to 64.3 per cent. The U. S. P. VIII requires not less than 60 per cent.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 87.

LYCOPODIUM.

Wallis, T. E.: A discussion of the use of lycopodium in quantitative microscopy. A table is given showing the counts of spores per milligram. The action of dilute acids and alkalies on lycopodium is also described.—Pharm. J. Lond. 1919, v. 103, p. 75–76.

MACIS, N. F.

Tschirch, A. and Schklowsky, H.: A report of studies in the chemistry of mace.—Arch. Pharm. 1915, v. 253, p. 102, through Pharm. Zentralh. 1919, v. 60, p. 294.

MAGMA FERRI HYDROXIDI, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for magma of ferric hydroxide. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

MAGMA MAGNESIÆ.

Terry, Robert W.: A paper dealing with the preparation of milk of magnesia and its analysis. The writer believes that the production of milk of magnesia by the interaction of magnesium sulphate and sodium hydroxide is far superior to the U. S. P. IX process.—J. Am. Pharm. Assoc. 1919, v. 8, p. 183–189.

Mueller, Sister Bertha: If dried magnesium sulphate is used in the preparation of magma magnesia, a nice smooth product is obtained which permits of the completion of the preparation in less than two week's time.—Western Druggist, 1919, v. 41, p. 265.

Hommell, P. E.: The proper name, "Magma Magnesia," should always be used instead of "milk of magnesia." While this antacid resembles milk in appearance and consistency, yet it is not essentially a milk, but after the manner of milk, that is "milkily," hence the words "milkily magnesia" would be proper.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

White, William R.: Milk of magnesia, or magnesium oxide and water, mixed with elixir of lactated pepsin, colored with amaranth red, will decolorize in a short time.—J. Am. Pharm. Assoc. 1919, v. 8, p. 557.

MAGNESII CARBONAS.

Jorissen, W. P.: Historical notes. Joseph Black, Petrus Driessen and others on magnesium carbonate.—Chem. Weekblad, 1919, v. 16, p. 1579–1589.

Grunwald, B. B.: U. S. patent No. 1285683. Light magnesium carbonate is prepared by separating dead burned magnesite from light calcined magnesite by sedimentation in water and then carbonating the hydrated magnesia.—Chem. Abstr. 1919, v. 13, p. 251.

Roberts, J. G.: Each of three lots of magnesium carbonate examined contained an excess of calcium amounting to 0.94, 1.24, and 1.32 per cent, respectively, calculated as calcium oxide.—J. Am. Pharm. Assoc. 1919, v. 8, p. 754.

MAGNESII OXIDUM.

Meunier, J.: The purification of magnesia. Conditions are described for the formation of periclase or crystallized magnesia.—Bull. soc. chim. France, 1919, v. 25, p. 560–562.

Zimmermann, Walther: A sample of magnesium oxide examined contained carbonate and chloride.—Apoth.-Ztg. 1919, v. 34, p. 14.

MAGNESII SULPHAS.

Crux, George C.: Data relative to the magnesium sulphate deposits at Basque, B. C. are given. Chemically pure magnesium sulphate suitable for medicinal use is found over considerable surface areas.—Canadian Chem. J. 1919, v. 107, p. 916–917.

Goldschmidt, Samuel, and Dayton, A. E.: The mechanism of absorption from the intestine. IV. A study of the behavior of sodium and magnesium sulphate solutions. Concentrated solutions of these salts placed in the intestines are diluted by the passage of fluid from the blood until the osmotic pressure approximates that of the blood.—Am. J. Physiol. 1919, v. 48, p. 450–458.

LeHeux, J. W.: The synergism of drugs. II. Ether-magnesium sulphate, magnesium sulphate-chloral hydrate, magnesium sulphate-urethan. No reinforcement of narcosis was observed in any of these cases.—Arch. ges. Physiol. 1919, v. 174, p. 105–119, through Physiol. Abstr. 1919, v. 4, p. 184.

Alston, J.: A 2 to 5 per cent solution of magnesium sulphate is employed as a dressing for inflamed and suppurated surfaces.—Medical Press, 1919, v. 107, p. 258.

Funk, E.: A sample of material labelled magnesium sulphate was found to consist of oxalic acid.—Zentralbl. f. Pharm. 1919, v. 15, p. 91, through Pharm. Zentralh. 1919, v. 60, p. 565.

MANGANI DIOXIDUM PRÆCIPITATUM.

Keenan, F. J.: Three lots of manganese dioxide assayed 66.2, 70.1, and 70.3 per cent, respectively, of manganese dioxide, but were otherwise U. S. P. The U. S. P. requires not less than 80 per cent manganese dioxide.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 87; J. Am. Pharm. Assoc. 1919, v. 8, p. 754.

MANGANI GLYCEROPHOSPHAS SOLUBILIS, N. F.

Lipman, L. J.: One lot of manganese glycerophosphate examined contained no citric acid and as a consequence was not as soluble as required by the N. F.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 87; J. Am. Pharm. Assoc. 1919, v. 8, p. 754.

MANNA.

Hommell, P. E.: Manna and its ancient preparations are so seldom prescribed that it is believed both should be relegated to the N. F.—Proc. New Jersey Pharm. Assoc. 1919, p. 42.

Braham, Joseph M.: A study of some physical properties of mannite and its aqueous solutions.—J. Am. Chem. Soc. 1919, v. 41, p. 1707–1718.

MATICO, N. F.

Alsberg, Carl L., et al.: This product has been much adulterated of late. In some instances the weeds of a closely related *Piper* species, *Piper bredemeyri* Jacq. have been substituted. One shipment upon examination proved to be obtained from an altogether unrelated species, *Eupatorium glutinosum* Lam.—J. Am. Pharm. Assoc. 1919, v. 8, p. 471.

MATRICARIA.

Anon.: It is stated that confusion often results in London and other cosmopolitan cities when foreigners ask for chamomiles and receive the flower heads of *Anthemis nobilis* instead of *Matricari chamomilla*, which they expect.—Chem. & Drug. 1919, v. 91, No. 2, p. 56.

Holmes, E. M.: Wholesale houses in London and Edinburgh are in the habit of supplying flowers of *Matricaria chamomilla* when "single" chamomiles are ordered, although the single flowers of *Anthemis nobilis* are distinguished as "Scotch" chamomiles.—Pharm. J. Lond. 1919, v. 103, p. 510.

Alsberg, Carl L., et al.: Recent importations of German chamomile flowers were found to be highly adulterated with the flowers of dog fennel, *Anthemis cotula* L. Another adulterant which has been offered for importation is the flower heads of wild Roman chamomile, *Anthemis nobilis* L.—J. Am. Pharm. Assoc. 1919, v. 8, p. 469.

Clevenger, Joseph F., and Ewing, C. O.: Notes on the adulteration of matricaria with *Santolina chamaecyparissus* L. and the detection of the latter.—J. Am. Pharm. Assoc. 1919, v. 8, p. 536–538.

Walter, A.: It is recommended that *Matricaria discoridea* be collected to replace the genuine German chamomile flowers which can not be obtained in Germany at present.—Pharm. Ztg. 1919, v. 64, p. 3043.

Hommell, P. E.: The dose of chamomile is 15 to 60 grains in infusion as a tonic. The U. S. P. gives the average dose as 4 drachms, which is an emetic dose.—Proc. New Jersey Pharm. Assoc. 1919, p. 41.

MENTHA PIPERITA.

Reclaire, A.: Notes on the peppermints and the other varieties of mint growing wild in the German empire.—Heil- und Gewürzpfl. 1918, v. 2, No. 1, p. 10–13.

Anon.: A report of the successful cultivation of peppermint in Holland. The yield of the oil obtained from two lots of herb was 0.7 and 0.95 per cent, respectively.—Pharm. Weekblad, 1919, v. 56, p. 41; see also W. C. de Graaff, ibid. p. 1109–1112.

Rolet, Antonin: Notes on the cultivation of peppermint, with special reference to the effect of culture conditions on the properties of the oil.—La Parfum. mod. v. 12, p. 25–27, through Chem. Zentralbl. 1919, v. 3, p. 101.

Kuraz, R.: Directions for the cultivation of peppermint are given.—Wiener landwirtschaftliche Ztg. 1918, No. 19, p. 134, through Heil- und Gewürzpfl. 1918, v. 2, No. 3, p. 62–63.

MENTHOL.

Anon.: Genuine crop shortage and control by a Japanese monopoly bureau are stated to be the causes for the scarcity of menthol in the United States.—Drug & Chem. Markets, 1919, v. 5, No. 55, p. 7–8.

von Friedrichs, Oscar: Formulas are derived by which the menthol content of solutions of menthol in eugenol and phenol may be directly calculated from the optical activity.—Arch. Pharm. 1919, v. 257, p. 72–78.

Arny, H. V., and Schaefer, Hugo H.: A description of a salting out method for the determination of menthol in alcoholic solution.—Proc. New York Pharm. Assoc. 1919, p. 218–219; J. Am. Pharm. Assoc. 1919, v. 8, p. 67.

Mayer, Joseph L.: A simple method for determining menthol in alcoholic solution consists in measuring off 5 cubic centimeters of the liquid into a weighed Petri dish or watch glass, placing in a desiccator over sulphuric acid for one night and weighing the residue.—Proc. New York Pharm. Assoc. 1919, p. 235–236.

METHYLIS SALICYLAS.

White, William R.: The addition of tartaric acid to darkened methyl salicylate and subsequent filtration restores the product to its natural color.—J. Am. Pharm. Assoc. 1919, v. 8, p. 557.

Anon.: Some samples of oil of birch examined by the Bureau of Chemistry were reported to consist wholly, or in part, of synthetic methyl salicylate and to differ from the standard of strength, quality, and purity as determined by the tests of the U. S. P.—S. R. A. Chem. Suppl. 1919, No. 58, p. 441; No. 60, p. 559.

Anon.: A report of a fatal case of poisoning, due to taking an overdose of oil of wintergreen.—Pharm. J. Lond. 1919, v. 103, p. 471.

Rosenbloom, J., and Johnston, J. M.: A case is recorded in which a female patient, aged 40, recovered after swallowing 1 ounce of oil of wintergreen in mistake for liquid petrolatum.—J. Am. M. Assoc. 1919, v. 72, p. 22.

METHYLTHIONINÆ CHLORIDUM.

Bile: Details are given for carrying out the manufacture of methylene blue according to the method of Bernthsen.—Rev. prod. chim. 1918, v. 21, p. 195.

Anon.: The inorganic matter present in samples of methylene blue examined varied from 0 to 1.7 per cent. In two cases, the ash amounted to 8 and 30 per cent, respectively. This consisted largely of zinc.—Evans' An. Notes, 1919, p. 66.

Maigre, Étienne: An experimental study of the antagonistic action of methylene blue toward tetanus toxin and strychnine.—Compt. rend. soc. biol. 1919, v. 82, p. 845–849.

Binger, Carl A. L.: A study of the selective inhibitory action of methylene blue and certain other common dyes on the growth of meningococci.—J. Infec. Dis. 1919, v. 25, p. 277–283.

McDroy, J. Hamilton: A report on the value of methylene blue in purulent discharge from the eye socket.—Brit. M. J. 1919, v. 1, p. 405–406.

MISTURA COPAIBA, N. F.

Bortnicker, Irving E.: The N. F. IV method for the preparation of copaiba mixture is criticized on the ground that the acid number of the resins in copaiba varies. A method, in which the copaiba is emulsified with acacia, is proposed.—Am. Drug. 1919, v. 67, No. 12, p. 33.

MISTURA CRETÆ.

Hommell, P. E.: The present chalk mixture should be deleted or modified, as the sugar content absolutely defeats the object for which it is intended. The following is suggested as an improved formula: Prepared chalk, 15 gm.; acacia in fine powder, 10 gm.; glycerin, 15 cc.; cinnamon water, 150 cc.; distilled water sufficient to make 250 cc.; to be freshly made when wanted.—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

MISTURA GLYCYRRHIZÆ COMPOSITA.

Hommell, P. E.: The formula for Brown mixture can be improved by leaving out the sugar and even the acacia and replacing them by a proper proportion of glycerin. Instead of the purified extract of licorice the fluidextract should be used.—Proc. New Jersey Pharm. Assoc. 1919, p. 41.

MISTURA RHEI ET SODÆ, U. S. P. VIII.

Lampa, Robert R.: The turbid mixture of rhubarb and soda produced by the formula official in the U. S. P. at the present time is objected to.—Proc. New York Pharm. Assoc. 1919, p. 54.

Hommell, P. E.: Why rhubarb and soda mixture was removed from the U. S. P. and placed in the N. F. seems strange, as it is widely known, highly esteemed, and is largely prescribed as a remedial agent and as a vehicle for laxative and alterative drugs. In order to enhance its therapeutic efficacy the formula should be modified. It has been suggested that the amount of glycerin be lessened, the present amount being too large for therapeutic and other reasons. The use of a small amount of alcohol as a solvent for some of the resinous and other principles contained in the mixture would be a further improvement.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

MORPHINA.

Skinner, Robert P.: A table is given showing the quantities of morphine and morphine salts exported from the United Kingdom during the period 1911 to 1918.—Com. Rep. 1919, No. 139, p. 1368.

von Braun, Julius: Researches on the morphine alkaloids. VI. An investigation of the stability of the nitrogen ring in morphine.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 1999–2011.

Wherry, Edgar T., and Yanovsky, Elias: A report of results of the crystallographic measurements of morphine, morphine monohydrate, codeine (morphine methyl ester), codeine monohydrate, codethylene (morphine ethyl ester) monohydrate, and heroin (diacetylmorphine).—J. Washington Acad. Sc. 1919, v. 9, p. 505–513.

Denigès, G.: If a few milligrams of morphine or its derivatives are heated with two or three drops of concentrated H_2SO_4 until slightly brown, then diluted with 5 cubic centimeters of saturated solution of sodium acetate and two drops of a 4 per cent solution of $HgCl_2$ are added, a characteristic green color will appear upon boiling.—Bull. soc. pharm. Bordeaux, 1918, v. 56, p. 185, through J. pharm. et chim. 1919, v. 19, p. 49.

Lautenschläger, L.: Morphine is the only member of the opium alkaloids which yields a true dye with diazonium compounds. The reaction can be used for the toxicological detection of morphine in the presence of its substitutes or other alkaloids.—Arch. Pharm. 1919, v. 257, p. 13–18; J. Soc. Chem. Ind. 1919, v. 38, p. 438A.

Annett, H. E., and Singh, H.: An investigation of the effect of morphine concentration on the B. P. method of morphine determination. The B. P. method gives low results in the case of opium of low morphine content but is accurate when applied to opium containing a normal amount of morphine.—Analyst (The), London, 1919, v. 44, p. 41–43; J. Soc. Chem. Ind. 1919, v. 38, p. 197A.

Heiduschka, A., and Faul, M.: A report of experiments on the solubility of morphine in ammonia in connection with the method for the estimation of morphine in opium described in the Ph. Germ. V., which is based on the precipitation of the morphine by means of ammonia and subsequent titration of the morphine with standard acid in the presence of iodeosin as the indicator.—Arch. Pharm. 1917, v. 255, p. 441–466, through J. Soc. Chem. Ind. 1919, v. 38, p. 737A.

Heiduschka, A., and Faul, M.: A note on the behavior of meconic acid in the quantitative estimation of morphine in opium.—Arch. Pharm. 1917, v. 255, p. 482–496, through J. Soc. Chem. Ind. 1919, v. 38, p. 737A.

von Friedrichs, O.: Ethyl acetate is used in place of ether in the determination of morphine in opium by the methods of the German, Swedish, Belgian, and other pharmacopœias. As a rule it gives slightly lower values than when ether is used. Under ordinary conditions the difference between the results obtained with ether and with pure ethyl acetate is less than 0.1 per cent.—Pharm. Zentralh. 1918, v. 59, p. 329–330; J. Soc. Chem. Ind. 1919, v. 38, p. 197A.

Anon.: Methods for the determination of morphine in powders and in medicinal preparations are described.—Pharm. Ztg. 1918, p. 87, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 34.

Palet, Luciano P. J.: A modified Flückiger method for the rapid detection of morphine in the chemico-toxicological analysis of viscera.—Anales soc. quim. Argentina, 1918, v. 6, p. 349–351, through Chem. Abstr. 1919, v. 13, p. 216.

Palet, Luciano P. J.: Two cases are described in which the presence of morphine in the viscera was demonstrated seven months and two years and six months, respectively, after death. In the former case cocaine or its decomposition products were also detected. When 100–120 grams of the visceral pulp is warmed at 50°–60° C. with 100 cubic centimeters of water and 5 cubic centimeters of sulphuric acid for two hours, the liquid becomes blood-red if morphine is present.—Anal. soc. quim. Argentina, 1919, v. 7, p. 22–26: J. Soc. Chem. Ind. 1919, v. 38, p. 438A.

Zoccola, Francesco: A study of the changes which take place in morphine, apomorphine, and cocaine solutions during sterilization.—Giorn. farm. chim. 1918, v. 67, p. 60–64, 90–96.

Damianovich, Horacio: A study of the catalytic effect of copper on oxidation processes, with particular reference to the sterilization of solutions of morphine prepared with water distilled in a copper still.—Anales soc. quim. Argentina, 1919, v. 7, p. 49–58.

Damianovich, Horacio, and Williams, Adolfo: A study of the stability of some solutions of enzymes and alkaloids by means of ultra violet absorption spectra, with special reference to solutions of pancreatin and morphine.—Anales soc. scient. Argentina, 1917, v. 84, p. 79–91, through Chem. Abstr. 1919, v. 13, p. 2223.

van Leersum, E. C.: A probable explanation of the Hermann-Straub biological reaction for morphine. The reaction is said to be the result of vesical and anal tenesmus.—Arch. néerland. physiol. 1918, v. 2, p. 689–710, through Physiol. Abstr. 1918, v. 3, p. 460.

Du Mez, A. G.: A review of the literature on the mechanism of increased tolerance and the withdrawal phenomena in chronic morphinism.—J. Am. M. Assoc. 1919, v. 72, p. 1069–1072.

Arbuzow, A. A.: A report of a study of the influence of morphine and heroine on the isolated heart of carnivorous and herbivorous animals.—Kharkov, Diss. 1917, through Physiol. Abstr. 1919, v. 4, p. 404.

Barbour, H. G., et al.: Data relative to the influence of morphine upon the fatality of chlorine poisoning are given.—J. Pharmacol. & Exper. Therap. 1919, v. 14, p. 55–59.

Uhlmann, F.: A report of experiments on cats which demonstrate that the constipating action of opium and its preparations is proportional to the morphine content.—Correspondenz-Blatt für Schweizer Aerzte, Basel, 1919, v. 49, p. 1587, through J. Am. M. Assoc. 1919, v. 73, p. 1808.

MORPHINÆ HYDROCHLORIDUM.

Kollo, Constantin: Solutions of morphine hydrochloride when sterilized in an autoclave at 120° C. undergo some decomposition, oxydimorphine, morphine oxide, and methylamine being formed. The percentage decomposed increases with the rise in temperature.—Bull. soc. chim. România, 1919, v. 1, p. 3–9, through Chem. Abstr. 1920, v. 14, p. 1674.

Funck, Erich: A commercial specimen of morphine hydrochloride examined was found to be adulterated with 20 per cent of calcium carbonate.—Pharm. Zentralh. 1919, v. 60, p. 289.

MOSCHUS.

Allen, Walter C.: Notes on the use of musk in therapy. It is noted that there is no scientific foundation for its use and that the drug is subject to gross substitution because of its limited supply.—Med. Rec. 1919, v. 95, p. 356–358.

MUCILAGO ACACIÆ.

Hommell, P. E.: Mucilage of acacia is now directed to be prepared frequently and preserved in small bottles in a cool place and not to be dispensed if sour or mouldy. This demulcent agent should be prepared extemporaneously, using granular acacia. The same procedure should apply to the syrup of acacia, as it is doubted whether many will employ the skill, time, and patience to prepare it according to the directions given in the U. S. P.—Proc. New Jersey Pharm. Assoc. 1919, p. 39.

MUCILAGO CHONDRI, N. F.

Hommell, P. E.: The N. F. should direct that mucilage of Irish moss be not dispensed unless recently prepared.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

MYRISTICA.

Houston, D. F.: The following is the standard for nutmeg given by the U. S. Department of Agriculture: "Nutmeg is the dried seed of *Myristica fragrans* Houtt., deprived of its testa, with or without a thin coating of lime (CaO). It yields not less than 25 per cent of nonvolatile ether extract, not more than 10 per cent of crude fiber, not more than 5 per cent of total ash, nor more than 0.5 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 14.

Leidy, Joseph: A summary of observations of the author and others in regard to the use of myristica in the treatment of amœbic dysentery.—Med. Rec. 1919, v. 95, p.354–356.

MYRRHA.

Ewe, G.: One lot of myrrh examined was rejected because it contained about 70 per cent of another gum. Four lots assayed 25.7, 25.8, 33.4, and 38.7 per cent, respectively, of alcohol-soluble matter. The U. S. P. requires not less than 35 per cent.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 88; J. Am. Pharm. Assoc. 1919, v. 8, p. 754.

NITROGENII MONOXIDUM.

Warner, A. R.: U. S. patent No. 1,315,354. Nitrogen monoxide produced commercially is purified by cooling to atmospheric temperature and treating the cooled gas successively with a solution of potassium permanganate, a 10 per cent solution of sodium hydroxide, and a 20 per cent solution of sulphuric acid. This treatment produces a gas suitable for use as an anesthetic.—Chem. Abstr. 1919, v. 13, p. 2982.

Desmarest and Amiot: Notes on the production of anesthesia by means of nitrous oxide. Illustrated.—Presse Médicale, 1919, v. 27, p. 457–459.

Davis, Warren B., and Spencer, William H.: A study of blood-pressure changes during nitrous oxide-oxygen anesthesia. It is concluded that there is no rise in blood pressure if sufficient oxygen is given to prevent rigidity, jactitation, or lividity.—Therap. Gaz. 1919, v. 43, p. 82–84.

NUX VOMICA.

Leuchs, Hermann, and Bendixsohn, Walter: A report of studies on the constitution of the strychnos alkaloids,—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 1443–1453, 2195–2204.

Schelenz, Hermann: Notes on the origin and usage of the term nux vomica.—Schweiz. Apoth-Ztg. 1918, v. 56, p. 245–248.

van der Berg, L. M.: Experimental data relative to the evaluation of nux vomica, tincture of nux vomica, and the extract of nux vomica are presented.—Pharm. Weekblad, 1919, v. 56, p. 1132–1134.

Éwe, G.: Of 12 samples of nux vomica examined, 7 did not comply with the U. S. P. requirements.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

OLEA PINGUA.

Thoms: The German war committee for oils and fats has issued a warning against the use of oil obtained from elderberries, either by expression or by solvents, for edible purposes. The oil obtained from the seed is said to produce injurious effects,—Pharm.-Ztg. v. 63, p. 500, through Pharm. J. Lond. 1919, v. 102, p. 34.

Ubbelohde, L., and Roederer, W.: A continuation of a contribution to the subject of the splitting of fats with sulphoaromatic acids.—Am. Perf. 1919, v. 13, p. 410–411.

Wright, C. H.: Data are given relative to the change of refractive indices of fixed oils due to changes in temperature.—J. Soc. Chem. Ind. 1919, v. 38, p. 392–394T.

Lapworth, A., et al.: Researches on the direct replacement of glycerol in fats by higher polyhydric alcohols. I. Interaction of olein and stearin with mannitol. II. The value of synthetic mannitol olive oil as a food.—Biochem. J. 1919, v. 13, p. 296–305.

Vollertsen, J. J., and Osborn, H. G.: A study of the titers and iodine values of mixtures of vegetable stearin (hydrogenated) and certain vegetable oils.—Cotton Oil Press, 1919, v. 2, No. 11, p. 39–40, through Chem. Abstr. 1919, v. 13, p. 3327.

Addens, H. Smit: A review of methods for the neutralization of free fatty acids in fats. Numerous references are given to Dutch and

Italian literature.—Oliën en Vetten, 1919, v. 3, p. 277–279, through Chem. Abstr. 1919, v. 13, p. 2608.

Richardson, W. D., et al.: Report of the committee on analysis of commercial fats and oils of the division of industrial chemists and chemical engineers of the American Chemical Society which was adopted April 14, 1919.—J. Ind. & Eng. Chem. 1919, v. 11, p. 1161–1168.

Prescher, J.: The reaction which depends on the blue color obtained when a rancid fat is shaken with blood solution and guaiacum tincture was found to be reliable for the detection of rancidity in butter and tallow.—Ztschr. Unters. Nahr.- u. Genussm. 1918, v. 36, p. 162–166, through J. Soc. Chem. Ind. 1919, v. 38, p. 81A.

van Raalte, A.: The benzene used in preparing the reagent for Bellier's reaction for vegetable oils must be free from thiophene, otherwise a dirty green, instead of a violet, coloration is obtained.—Chem. Weekblad, 1919, v. 16, p. 959–960.

Weehuizen, E. and F.: A microchemical method for the determination of fat.—Pharm. Weekblad, 1919, v. 56, p. 810–822.

Herbig, W.: A continuation of an article on the analysis of fats.—Am. Perf. 1919, v. 14, No. 2, p. 63–64; ibid. No. 3, p. 103–104, 145.

Anon.: A method for the determination of salicylic esters in fatty oils is described.—Pharm. Centralh. 1918, p. 50, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 34.

Carcano, L.: A discussion of the errors involved in the determination of the acetyl value of oils, especially the occurrence of saponification when acetylated compounds are repeatedly washed with hot water.—Boll. chim.-farm. 1919, v. 58, p. 121–122.

Blomberg, C.: Notes on Winkler's bromate method for the analysis of unsaturated compounds, such as fats and oils. The method is stated to need standardization with respect to the amount of sample used and the time allowed for reaction.—Pharm. Weekblad, 1919, v. 56, p. 1716.

de Jong, D. J.: Data obtained in the determination of peanut oil in fats and oils by the method of Franz-Adler are presented.—Chem. Umschau, 1918, v. 25, p. 90, through Pharm. Zentralh. 1919, v. 60, p. 117.

Meyer, L.: A comparison of the methods of Böhmer and Davidsohn for the determination of unsaponifiable matter in fats and oils. Data of this nature obtained for several oils are given.—Die Seife, 1919, p. 459, through Chem. Umschau, 1919, v. 26, p. 41–42.

Normann and Hugel: Experimental work on the determination of light hydrocarbons in fats are reported.—Chem. Umschau, 1919, v. 26, p. 19–20.

Riess, G.: A report of the chemical examination of hardened fats to determine their content of nickel and arsenic.—Arb. Reichsgeshamt 1919, v. 51, p. 521, through Zentralbl. Biochem. u. Biophys. 1919, v. 21, p. 423.

van Leent, F. H.: Notes on methods for differentiating between animal and vegetable fats.—Olien en vetten, v. 1, p. 343–345, 361–364, through Zentralbl. Biochem. u. Biophys. 1919, v. 20, p. 5.

Klein, Frederick: A report of some laboratory studies on vegetable and mineral oils, with special reference to their differentiation.—Pract. Drug. 1919, v. 37, No. 5, p. 26–27.

Knorr, F.: The results of analysis of a large number of edible fats and oils are given in tabular form.—Seifensieder-Ztg. 1919, v. 46, p. 521–522, through Chem. Zentralbl. 1919, v. 4, p. 754.

Kobayashi, I. S.: An account of analyses of the oils from the seeds of the citron, Chinese citron, and kumquat. A table is given which shows the characters of the oils. The oils are of the semidrying class, and the proportion of solid fatty acids is about 19–27 per cent.—J. Chem. Ind. Tokyo, 1918, v. 21, p. 1235–1245, through J. Soc. Chem. Ind. 1919, v. 38, p. 294A.

Schlue, Nelda, and Maxwell, Harold L.: Data relative to the analytical constants of peanut oil are given.—Chem. News, 1919, v. 119, p. 185.

Hein, F., et al.: Arachis oil hydrogenated to a hard fat, with nickel formate as catalyst, melted at 58° C., solidified at 47.8° C., and gave an iodine value of 13.5.—Bull. de l'office Colonial, 1918, v. 11, p. 355–361; Bull. Agric. Intell. 1919, v. 10, p. 108–109, through J. Soc. Chem. Ind. 1919, v. 38, p. 426A.

Wunschendorff, H. E.: The physical and chemical constants of the fixed oil of fenugreek are presented.—J. pharm. et chim. 1919, v. 19, p. 397.

Heiduschka, A., and Lüft, K.: An investigation of the properties of the fatty oil extracted from the seeds of the evening primrose.—Arch. Pharm. 1919, v. 257, p. 33–69.

Brubaker, H. W.: Data relative to the physical and chemical constants of the oil extracted from sumac berries are given.—J. Ind. & Eng. Chem. 1919, v. 11, p. 950.

von Friedrichs, Oscar: Researches on the fatty oils of the conifers. I. A study of pine oils.—Svensk farm. Tidskr. 1919, v. 23, p. 445–451, 461–463, 500–505.

Bolton, E. Richards: The analytical values of the oil of *Ceratotheca sesamoids*, which is closely allied to *Sesamum indicum*, are given.—Analyst (The), London, 1919, v. 44, p. 233–234.

Ferencz, A.: An investigation of the expressed oil of blessed thistle (*Cnicus benedictus* L.). The physical and chemical constants of the oil are given.—Arch. Pharm. 1919, v. 257, p. 180–190.

Anon.: Data relative to the composition of Japanese shark oil are given.—Seifenfabr. 1919, v. 39, p. 227–229, through Chem. Zentralbl. 1919, v. 4, p. 753.

Ferencz, A.: Some physical and chemical constants of the following oils are given: Carthamus oil, belladonna oil, castor oil, staphylea oil, and cladium oil.—Pharm. Post, 1918, v. 51, p. 761–763, through Chem. Zentralbl. 1919, v. 2, p. 235.

Le Moignie, E., and Sézary, A.: From experiments on rabbits, it is concluded that repeated injections of vegetable oils given intravenously produce grave pulmonary lesions.—Compt. rend. soc. biol. 1919, v. 82, p. 1004–1007.

Lansberg, L. M.: Fatty oils for medicinal use must be sterile. Investigation showed that such oils are invariably sterile without any special treatment, and that they have an appreciable bactericidal action at room temperature. Tuberculosis bacilli, unlike other kinds, do not dissolve in vegetable oils, but are soluble in cod-liver oil.—Pharm. Weekblad, 1919, v. 56, p. 1726–1727.

Anon.: A book review calls attention to a volume by C. A. Mitchell entitled *Edible Oils and Fats*.—Pharm. J. Lond. 1919, v. 102, p. 44.

Anon.: A review of a volume by P. J. Fryer, and F. E. Weston entitled *Technical Handbook of Oils, Fats, and Waxes*, v. 2, *Practical and Analytical*.—Pharm. Weekblad, 1919, v. 56, p. 334.

OLEUM AMYGDALÆ EXPRESSUM.

Suto, K.: A sample labeled "Oil Almond, Expressed, Not U. S. P." consisted of oil of peach kernels.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 88; J. Am. Pharm. Assoc. 1919, v. 8, p. 754.

OIL, CHAULMOOGRA (NONOFFICIAL).

Cofman, Victor: Data relative to the acid value, iodine value, and melting-point of chaulmoogra oil are presented.—Pharm. J. Lond. 1919, v. 103, p. 269.

Shelley, F. F.: A short note calling attention to the wide variation in the acidity value of chaulmoogra oil. Values ranging from 8.3 to 76 were obtained.—Pharm. J. Lond. 1919, v. 103, p. 195.

Éwe, G.: One lot of chaulmoogra oil examined had a specific gravity of 0.907 at 45° C., iodine number 107, saponification number 185, acid number 11.4. This lot did not conform to the Ph. Brit. standards.—J. Am. Pharm. Assoc. 1919, v. 8, p. 755.

Anon.: The analytical constants of nine samples of chaulmoogra oil examined are given.—Evans' An. Notes, 1919, p. 57.

Hollman, H. T., and Dean, A. L.: From 12 years' experience in the treatment of leprosy, the authors are convinced of the value of chaulmoogra oil. Fractions of the fatty acid isolated from the oil are superior for this purpose to chaulmoogra mixtures.—J. Cutaneous Diseases, Chicago, 1919, v. 37, p. 367, through J. Am. M. Assoc. 1919, v. 73, p. 450.

OLEUM LINI.

Ingle, H., and Woodmansey, A.: A study of the polymerization and oxidation of linseed oil.—Rev. chim. industrielle, 1919, v. 28, p. 367–372.

Sheppard, E. J.: A report of an investigation of the effect of exposure on certain constants of raw linseed oil over a limited range of gain in weight.—J. Ind. & Eng. Chem. 1919, v. 11, p. 637–639.

U. S. Interdepartmental Committee on Paint Specifications Standardization: Specifications recommended for linseed oil, raw, refined, and boiled, are presented.—Circ. Bur. Stand. 1919, No. 82.

Heckel, J. H.: A review dealing with the action of foots in linseed oil.—Drugs, Oils, and Paints, 1919, v. 35, p. 88–90.

Holden, G. E., and Radcliffe, L. G.: A study of the oxidation of linseed oil.—J. Soc. Dyers Colourists, 1918, v. 34, p. 138–145, through Chem. Zentralbl. 1919, v. 2, p. 366.

Collier, F. C.: A report of the analysis of 70 samples of linseed oil and its substitutes. The sources, properties, and adulterants of the oil are discussed. Mineral oil is stated to be the adulterant most frequently encountered.—Bull. Lab. Dept. Trade & Commerce. Ottawa, Canada, 1919, No. 430.

Anon.: Of 21 samples of linseed oil examined, 5 were rejected.—Rep. Wisconsin D. & F. Com. 1919, June, p. 38.

OLEUM MORRHUÆ.

Anon.: A table is given showing the physical and chemical constants of Newfoundland and Norwegian cod-liver oil, also the requirements of the Ph. Brit.—Montreal Pharm. J. 1919, v. 30, p. 38.

Anon.: In 300 samples of cod-liver oil examined, the refractive index never exceeded 1.482 at 15° C. Over 50 per cent of the medicinal oils gave a refractive index of from 1.4801 to 1.4802. Two oils gave iodine values of 145.6 and 150.1, respectively, and seven oils gave saponification values of 194.8 to 197.—Evans' An. Notes, 1919, p. 41.

Bohrisch, P.: The examination of five different samples of cod-liver oil is reported on, and certain changes in the Ph. Germ. specifications for cod-liver oil are suggested.—Apoth.-Ztg. 1918, v. 33, p. 515–516, 519–520, 523–524, 531–532, through Chem. Zentralbl. 1919, v. 2, p. 209.

Winberg, Eric: A note on the preparation of *Oleum jecoris Aselli ferratum*.—Svensk farm. Tidskr. 1919, v. 23, p. 567–568.

OLEUM OLIVÆ.

Houston, D. F.: The following is the standard for olive oil given by the U. S. Department of Agriculture: "Olive oil, sweet oil, is the edible oil obtained from the sound, mature fruit of the olive tree (*Olea europaea* L.)."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 17.

Trevithick, H. P.: Foreign and imported oils. A table is given showing all of the constants of olive oil.—Cotton Oil Press, 1919, v. 3, No. 1, p. 37–39.

Trevithick, H. P.: Both the Baudouin and Villavecchia test for sesame oil in olive oil give color reactions with some pure oils if performed as directed in the official A. O. A. C. methods. By the U. S. P. method, the color reaction is only obtained with samples containing sesame oil.—Cotton Oil Press, 1919, v. 3, No. 6, p. 40, through Chem. Abstr. 1920, v. 14, p. 645.

Anon.: Analytical data obtained in the testing of over 450 samples of olive oil are presented.—Evans' An. Notes, 1919, p. 69–71.

Anon.: Of 10 samples of olive oil examined, 4 were not of standard quality.—Rep. Wisconsin D. & F. Com. 1919, June, p. 41.

Anon.: The Bureau of Chemistry reports numerous instances in which olive oil has been adulterated with cottonseed oil.—S. R. A. Chem. Suppl. 1919, No. 55, p. 263, 266; No. 60, p. 532, 534, 579, 580, 581, 582; No. 61, p. 31, 35, 36, 40, 41, 44, 45, 46.

OLEUM RICINI.

Chaveau, Claudius: An account of the cultivation of *Ricinus communis* L. and the production of castor oil in Morocco.—Ann. chim. anal. chim. appl. 1919, v. 1, p. 313–317.

Alexander, W. B.: A yield of 49 per cent of oil was obtained from the seeds of the castor-oil plant growing wild in Australia.—Sci. & Ind. Australia, 1919, v. 1, p. 99–103, through Chem. Abstr. 1919, v. 13, p. 2460.

Schroeder, J. H.: A description of the manufacture of castor oil. Illustrated.—Chem. Age., New York, 1919, v. 1, No. 1, p. 105–109.

Anon.: Statistics are given showing the quantities of castor oil exported from the Dutch East Indies for the years 1913 to 1918, inclusive.—Pharm. Weekblad, 1919, v. 56, p. 1630–1631.

Anon.: A note describing some of the properties of oil of Cavete, which is thought by a correspondent to have been used as a substitute for castor oil.—Am. Druggist, 1919, v. 67, No. 2, p. 39.

Ferencz, A.: Data showing the physical and chemical constants of certain oils are given. Castor oil obtained by hot pressing had a density of 0.9636; index of refraction of 1.4750; acid number 3.80;

saponification number 183.33; iodine number 89.34.—Pharm. Post, 1918, v. 51, p. 761–763, through Chem. Zentralbl. 1919, v. 2, p. 235.

Trevithick, H. P.: Foreign and imported oils. A table is given showing all of the constants of castor oil.—Cotton Oil Press, 1919, v. 3, No. 1, p. 37–39.

Atkins, W. R. G.: A note calling attention to a sample of castor oil prepared from Egyptian seeds which showed an abnormally low viscosity but was otherwise normal.—Analyst, 1919, v. 44, p. 287–288.

Miller, H. L.: To remove the rancidity from castor oil, mix 100 parts of the oil at 95° F. with a mixture of one part of alcohol 96 per cent and one part of sulphuric acid, allow to settle for 24 hours, wash with warm water, and separate the oil.—Spatula, 1919, v. 26, p. 97.

Anon.: Forty-eight of 400 samples of castor oil examined were just outside the Ph. Brit. limit for acidity. The temperature of turbidity in the Ph. Brit. petroleum spirit test ranged from 17.5° to 31° C. for genuine oils.—Evans' An. Notes, 1919, p. 36.

Boyé, G., and Guyot, R.: Castor oil is found to be an active poison for flies.—J. pharm. et chim. 1919, v. 19, p. 220–221.

OLEUM SESAMI.

Houston, D. F.: The following is the standard for sesame oil given by the U. S. Department of Agriculture: "Sesame oil, gingili oil, teel oil, benne oil, is the edible oil obtained from the seed of the sesame plant (*Sesamum indicum*, DeCandolle; *Sesamum radiatum*, Schum and thonn: *Sesamum orientale* L.)."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 18.

Schaefer, W.: The best method of refining sesame oil and most other vegetable oils consists in treating the oil in the cold with sodium hydroxide lye, then heating to 50° C., and allowing the sediment to deposit. The oil is then decanted, mixed with 0.4 per cent of dilute hydrochloric acid at 70°–90° C., and again allowed to stand, then filtered and decolorized with fuller's earth.—Chem. Umschau, 1919, v. 26, p. 17–19, through J. Soc. Chem. Ind. 1919, v. 38, p. 505A.

Rai, H., and Dunnicliff, H. B.: A report of experiments undertaken to purify Indian sesame (til) oil.—J. Soc. Chem. Ind. 1919, v. 38, p. 99R.

Bosch, A. T.: A characteristic green color is obtained when 1 cubic centimeter of petroleum ether, benzine, or chloroform containing 1 drop of sesame oil in solution is mixed with an equal volume of a mixture of sulphuric acid and hydrogen peroxide.—Boll. chim.-farm. 1918, v. 57, p. 305.

OLEUM THEOBROMATIS.

Houston, D. F.: The following is the standard for cacao butter given by the U. S. Department of Agriculture: "Cacao butter, cocoa butter, is the edible fat obtained from sound cacao beans (*Theobroma cacao* L.), either before or after roasting."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 17.

Marsek, F. A.: Data relative to the chemical constants of cocoa butter are presented. Its use in the preparation of cosmetics is discussed.—Am. Perf. 1919, v. 14, p. 229–230.

Batten, Lilly, and Bywaters, W.: A report of an investigation of the occurrence of mould in cocoa butter. The experiments conducted showed that there was little danger of cocoa butter becoming mouldy provided it is kept free from moisture. An abstract.—Am. J. Pharm. 1919, v. 91, p. 112–115.

Hommell, P. E.: The U. S. P. should give directions for the proper storing of cocoa butter.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

Gardner, J. A., and Fox, F. W.: A report of investigations on the digestibility of cocoa butter.—Biochem. J. 1919, v. 13, p. 368–377.

OLEA VOLATILA.

Anon.: A review of the work on essential oils and their constituents in the years 1914 and 1915.—Rev. gén. chim. 1917, v. 20, p. 54–65: 1918, v. 21, p. 3–8, through Chem. Abstr. 1919, v. 13, p. 889.

Pellini, G.: A review of work on volatile oils and perfumes published during the years 1914 to 1918. References to the literature are given.—Giorn. chim. ind. 1919, v. 1, p. 119–126, 178–188.

Durrans, Thos. H.: The relationship between odor and chemical constitution, a paper based on a thesis submitted to the University of London.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 104–136.

Anon.: An account of the production of volatile oils in the Dutch East Indies.—Chem. & Drug. 1919, v. 91, No. 1, p. 38.

Reclaire, A.: Notes on some essential-oil-containing plants growing wild in Holland.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 289–290.

Anon.: A discussion of the possibility of increasing the cultivation of the camphor tree and the production of camphor oil in the British Empire.—Perf. & Ess. Oil Rec. 1919, v. 10, No. 3, p. 57–59.

Anon.: The distillation of various essential oils from plants in the land of their origin is described.—Deutsch. Parfum. Ztg. 1919, v. 5, p. 205–207, through Chem. Zentralbl. 1919, v. 4, p. 1105.

Anon.: Old resinified volatile oils can only be rendered fit for use by fractional distillation.—Pharm. Ztg. 1918, p. 409, through Schweiz. Apoth.-Ztg. 1919, v. 56, p. 140.

Verley: A review of the literature and a report of researches on the constitution of geraniol, linalool, and nerol.—Bull. soc. chim. France, 1919, v. 25–26, p. 68–80.

Prins, H. J.: A report of researches dealing with the reciprocal condensation of unsaturated compounds.—Chem. Weekblad, 1919, v. 16, p. 1510–1526.

Béhal, A.: The isolation and characterization of alcohols by means of their allophanic esters is described.—Bull. soc. chim. France, 1919, v. 25, p. 473.

Bennett, C. T.: Special reactions of terpenes are discussed under the following heads: oxidation, reduction, dehydration, hydration, isomerization, cyclization, conversion of glycols into aldehydes and ketones, esters by the Grignard reaction, etc.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 80–86.

Slawinski: A description of a method for preparing an addition product of hypochlorous acid to terpineol. An abstract.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 19.

Radcliffe, L. G.: The final installment of a paper on phenols and their derivatives which are used in the perfume industry.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 5–7.

Wallach, O.: A report of researches on the chemistry of the terpenes and volatile oils.—Ann. Chem. 1918, v. 414, p. 195–243, 257–275, through J. Chem. Soc. Lond. 1918, v. 114, No. 1, p. 428–429, 439–456.

Bennett, C. T., and Hollins, O.: Descriptions of some special reactions of terpene chemistry.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 80–86.

Furukawa: In a discussion of methods for the detection of the allyl group in essential oils, it is pointed out that Kobert's phloroglucinol-hydrochloric acid reaction is not invariably a trustworthy test for the presence of the allyl group.—J. Chem. Ind. Tokyo, 1918, v. 21, p. 573–575, through Perf. & Ess. Oil Rec. 1919, v. 10, p. 20.

Radcliffe, L. G., and Loo, S. C.: A description of a method for the preparation of semioxamazide and a discussion of its use in the identification of aldehydes and ketones.—Perf. & Ess. Oil Rec. 1919, v. 10, No. 2, p. 39–41.

de Jong, A. W. K.: A study of methods for the determination of geraniol in citronella oil. The quantitative esterification of geraniol by phthalic anhydride was found to be impossible to accomplish, although with mixtures of geraniol and citronella this method gives results differing but little from the true values.—Proc. K. Akad. Wetensch. Amsterdam, 1919, v. 21, p. 576, through J. Chem. Soc. Lond. 1919, v. 116, part 2, p. 171.

Hofman, J. J.: A review of methods for the determination of geraniol, with special reference to oil of citronella.—Oliën en Vetten, 1919, v. 3, p. 259–261, through Chem. Abstr. 1919, v. 13, p. 2573.

Elze, F.: The physical and chemical constants of rose oil extracted with volatile solvents are given.—Chem. Ztg. 1919, v. 43, p. 747.

Elze, F.: A peppermint-like essential oil has been extracted from a plant growing in central and northern France. The plant appears to be a cross between *Menthae piperitae* and *M. pulegium.* The oil is poor in menthol and rich in pulegone.—Chem. Ztg. 1919, v. 43, p. 740.

Macculloch, A. F.: An investigation of the essential oil distilled from *Juniperus procera.* The physical and chemical constants of the oil are given.—J. Soc. Chem. Ind. 1919, v. 38, p. 364T.

Furukawa, S.: Analytical data on Japanese geranium oils are presented.—J. Chem. Ind. Japan, 1919, v. 22, p. 83–90.

Hofman, J. J.: A report of a chemical study of the essential oil of *Cymbopogan javanensis.*—Pharm. Weekblad, 1919, v. 56, p. 1279–1289.

Shinosaki, Yeinosuke: A report of a chemical examination of the essential oil of *Pinus thunbergii* Parl.—J. Chem. Ind. Tokyo, 1919, v. 23, p. 451–454.

Kondo, Heisaburo, and Seitaro, Yamaguchi: A chemical investigation of the essential oil of *Perilla citriodora* Makino.—J. Pharm. Soc. Japan, 1919, No. 446, p. 263–275.

Hoshino, Kozo: The physical and chemical characteristics of six Japanese essential oils are described.—J. Chem. Ind. Tokyo, 1919, v. 22, p. 969–975.

Phillips, Max: A report of researches to determine the constituents of the oil of Canada balsam. Pinene and an unidentified terpene were isolated.—J. Am. Pharm. Assoc. 1919, v. 8, p. 175–177.

Phillips, Max: Notes on an unusual oil obtained from *Monarda punctata.*—J. Am. Pharm. Assoc. 1919, v. 8, p. 177–179.

Faucillon, Xavier: Data showing the physical constants of dill oil obtained from German, English, Russian, Spanish, Japanese, and Indian sources are given.—Perf. & Ess. Oil Rec. 1919, v. 10, No. 2, p. 38.

de Lorgues, J.: An article enumerating the narcissi which yield odorous principles, with an account of the cultivation and harvesting of the more important members. An abstract.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 17–18.

Shinosaki, Y., and Hoshino, K.: An investigation of the chemical and physical properties of the essential oil obtained from the fruits of *Amorpha fruticosa.* An abstract.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 89.

Tsuchihashi, R., and Tasaki, S.: A report of the extraction of an essential oil and wax from shuei flowers (*Jasminum odoratissimum*). The analytical values of both are recorded.—J. Chem. Ind. Tokyo, 1918, v. 21, p. 1117–1143, through J. Soc. Chem. Ind. 1919, v. 38, p. 117A.

Murayama, Yoshiatsu: Data obtained in the examination of the essential oil distilled from *Mosla punctata* Maxim are given.—J. Pharm. Soc. Japan, 1919, No. 450, p. 663.

Anon.: A report of an examination of an oil obtained from the leaves of *Leptospermum flavescens* v. *granflorum.* The oil was found to contain 90 per cent of aldehyde and a phenol related to geraniol or citronellol.—Chem. & Drug. 1919, v. 91, p. 74.

Hoshino: A report of an examination of the essential oil of *Mosla japonica.* The principal constituent of the oil was found to be either thymol or carvacrol, but both were not present in the same sample.—J. Chem. Ind. Tokyo, 1919, v. 22, p. 557–568.

Furukawa, S.: A study of the physiological action of essential oils.—J. Tokyo Chem. Soc. 1919, v. 40, p. 42–59.

Bleecher, Geo. J.: A note on the value of essential oils as antiseptics in dentistry.—Dental Digest, 1919, v. 25, p. 650–651.

Anon.: A review of a volume on refractive indices compiled by R. Kanthack and edited by J. N. Goldsmith. The title of the volume is *Tables of Refractive Indices.* V. I, *Essential Oils.*—Chem. & Drug. 1919, v. 91, No. 37, p. 75.

Anon.: A book review calls attention to a volume by R. M. Gattefosse entitled *Agenda du Chimiste Parfumeur.*—Perf. & Ess. Oil Rec. 1919, v. 10, p. 10.

A. S.: A review of a thesis by J. J. Hofman entitled *Contribution à l'Etude des essences des Graminées de l'Inde.*—Bull. sc. pharmacol. 1919, v. 26, p. 394.

Anon.: A review of the third edition of volume 2 of a work by Ernest J. Parry entitled *The Chemistry of Essential Oils and Artificial Perfumes.*—Perf. & Ess. Oil Rec. 1919, v. 10, p. 172–173.

OLEUM AMYGDALÆ AMARÆ.

Houston, D. F.: The following is the standard for oil of bitter almonds given by the U. S. Department of Agriculture: "Oil of bitter almonds, commercial, is the volatile oil obtained from the seed of the bitter almond (*Amygdalus communis* L.), the apricot (*Prunus armeniaca* L.), or the peach (*Amygdalus persica* L.)."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 15.

Anon.: Attention is directed to the low refractive indices of some samples of genuine oil of bitter almond. It is recommended that a lower limit of 1.54 be established for this oil.—Evans' An. Notes. 1919, p. 15–16.

OLEUM AURANTII.

Houston, D. F.: The following is the standard for oil of orange given by the U. S. Department of Agriculture: "Oil of orange is the volatile oil obtained, by expression or extraction with alcohol, from the fresh peel of the orange (*Citrus aurantium* L.), and has an optical rotation (25° C.) of not less than +95° in a 100-millimeter tube."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 16.

Anon.: Data showing the specific gravity, optical rotation, and refractive index of 21 samples of oil of sweet orange are given.—Evans' An. Notes, 1919, p. 75.

OLEUM AURANTII AMARI, N. F.

Anon.: The specific gravity, optical rotation, and refractive index of 17 samples of oil of bitter orange examined are given.—Evans' An. Notes, 1919, p. 76.

OLEUM CADINUM.

Huerre, R.: A report of work on the dry distillation of *Juniperus oxycedrus* and other coniferous woods contains data relative to the preparation of oil of cade.—J. pharm. et chim. 1919, v. 19, p. 33–42, 65–79.

Keenan, F. J.: One lot of oil of cade was not of U. S. P. quality, as it responded to the test for rosin.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 88.

OLEUM CAJUPUTI.

Anon.: An account of the distillation and preparation for market of oil of cajuput in the Dutch East Indies.—Chem. & Drug. 1919, v. 91, No. 1, p. 38.

OLEUM CAROPHYLLI.

Houston, D. F.: The following is the definition for oil of cloves recognized by the U. S. Department of Agriculture: "Oil of cloves is the lead-free volatile oil obtained from cloves."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 15.

OLEUM CASSIÆ.

Houston, D. F.: The following is the standard for oil of cassia recognized by the U. S. Department of Agriculture: "Oil of cassia is the lead-free volatile oil obtained from the leaves or bark of *Cinnamomum cassia* Bl., and contains not less than 75 per cent by weight of cinnamic aldehyde."

"Oil of cinnamon is the lead-free volatile oil obtained from the bark of the Ceylon cinnamon (*Cinnamomum zeylanicum* Breyne), and contains not less than 65 per cent by weight of cinnamic aldehyde and not more than 10 per cent by weight of eugenol."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 15.

Anon.: Data showing how the physical constants of oil of cinnamon obtained from Gold Coast bark as compared with English distilled oils and the Ph. Brit. requirements are presented.—Bull. Imp. Inst. 1918, v. 16, p. 146; ibid, v. 17, p. 189.

Anon: A systematic control of the quality of cassia and anise oils at the primary point of shipment is suggested as a means of preventing adulteration.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 308.

OLEUM CHENOPODII.

Editorial: Experiments conducted in Java indicate that oil of chenopodium is superior to thymol in the treatment of hookworm.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 139–140.

Hall, Maurice C.: Studies on anthelmintics. IV. Experiments with combinations of oil of chenopodium and chloroform are reported.—J. Am. Vet. Med. Assoc. 1919, v. 56, p. 59–70.

Anon.: A report of a case of poisoning due to the ingestion of an overdose of chenopodium oil.—Correspondenzblatt für Schweizer Aerzte, 1919, Nos. 6 and 12, through Pharm. Weekblad, 1919, v. 56, p. 525.

Oppikofer, E.: Notes on poisoning by oil of chenopodium. Up to the present time, 15 cases of severe poisoning, 10 of which were fatal, have been reported. A partial loss of hearing is one of the results most often observed in cases of poisoning.—Correspondenzblatt für Schweizer Aerzte, 1919, v. 49, p. 161, through Pharm. Zentralh. 1919, v. 60, p. 318.

Ryhiner, P.: Three cases of serious poisoning, two of them being fatal, due to oil of chenopodium are reported. In one of the fatal cases the dose was 30 drops of the oil administered in three portions at intervals of one hour. This dose was repeated the next day, when the child died.—Correspondenzblatt Schweiz. Aerzte, 1919, v. 49, p. 360, through J. Am. M. Assoc. 1919, v. 73, p. 1498.

OLEUM GOSSYPII SEMINIS.

Houston, D. F.: The following is the standard for cottonseed oil given by the Department of Agriculture: "Cottonseed oil is the edible oil obtained from the seed of the cotton plant (*Gossypium herbaceum* L.), or from the seed of other species of *Gossypium*."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 17.

Priest, I. G.: Recommendations are made in regard to the color grading of cottonseed oil.—Cotton Oil Press, 1919, v. 3, No. 3, p. 86–88, through Chem. Abstr. 1920, v. 14, p. 133; see also H. V. Arny et al., J. Ind. & Eng. Chem. 1919, v. 11, p. 950–953.

Wesson, David: A report of some investigations relative to the glycerides of cottonseed oil. There are 18 mixed glycerides theoretically possible, and these may account for many anomalies in the melting points and iodine numbers observed in lard substitutes. Graphic formulas are given showing all of the possible mixed glycerides of the three predominant acids of the oil.—Cotton Oil Press. 1919, v. 3, No. 7, p. 34-35, through Chem. Abstr. 1920, v. 14, p. 134.

OLEUM EUCALYPTI.

Beringer, Geo. M.: A book review calls attention to part five of volume 4 of a work by J. H. Maiden entitled *A Critical Revision of the Genus Eucalyptus.*—Am. J. Pharm. 1919, v. 91, p. 899.

Ghose, T. P.: Notes on the physical constants of the oils of *Eucalyptus tereticornis* and *Eucalyptus crebra.*—Perf. & Ess. Oil Rec. 1919, v. 10, p. 145.

Smith, H. G.: A note on the occurrence of the terpene, terpinene, in the oil of *Eucalyptus inegacarpa.*—J. Proc. Roy. Soc. N. S. Wales. 1919, v. 52, p. 529–533.

Anon.: A note on the use of the refractometer for the testing of eucalyptus oil.—Chem. Zentralbl. 1919, v. 2, p. 180.

Bennett, C. T., and Salmon, M. S.: A reply to questions presented by Alfred Lawrence relative to the determination of eucalyptol in eucalyptus oil. Analytical data are presented.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 211–212.

Anon.: Analytical data obtained in the examination of 150 samples of eucalyptus oil are presented in the form of tables.—Evans' An. Notes, 1919, p. 52–54.

Grieg-Smith, I. R.: An investigation of the bactericidal power of eucalyptus oils. Data are also given on the chemical constituents of eucalyptus oils from various sources, and the crude oils are classified with respect to the amounts of cineole, pinene, phellandrene and piperitone contained in each.—Proc. Linn. Soc. N. S. Wales, 1919, v. 44, p. 72–79, 311–347.

Anon.: A report of a fatal case of poisoning in a boy two years of age, due to the ingestion of an unknown quantity of eucalyptus oil.—Chem. & Drug. Lond. 1919, v. 91, No. 51, p. 53.

Auerbach, E.: A report of a case of poisoning due to the ingestion of eucalyptus oil. A man 47 years of age took about 20 cubic centimeters of the oil and became severely poisoned but recovered in 4 days.—Deutsch. med. Wchnschr. 1919, v. 45, p. 1165–1166.

OLEUM FŒNICULI.

Anon.: Data obtained in the examination of 30 samples of commercial oil of fennel are presented in the form of tables.—Evans' An. Notes, 1919, p. 54–55.

OLEUM LAVANDULÆ.

Salamon, M. S.: Attention is directed to the use of ethyl esters of the fatty acids of coconut oil in the adulteration of oil of lavender. An indication of the presence of the adulterant is afforded by the production of a milky liquid when the fatty acids are liberated.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 175.

Anon.: A book review calls attention to a brochure by Gattefossé and Lamotte dealing with the culture and industry of aromatic plants.—Am. Perf. 1919, v. 14, p. 196.

OLEUM LIMONIS.

Houston, D. F.: The following is the standard for oil of lemon recognized by the U. S. Department of Agriculture: "Oil of lemon is the volatile oil obtained, by expression or alcoholic solution, from the fresh peel of the lemon (*Citrus limonum* L.), has an optical rotation (25° C.) of not less than +60° in a 100-millimeter tube, and contains not less than 4 per cent by weight of citral."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 16.

Anon.: It is reported by the Bureau of Chemistry that in some instances washed lemon oil and other essential oil or oils have been substituted in whole or in part for true lemon oil.—S. R. A. Chem. Suppl. 1918, No. 34, p. 184; No. 41, p. 21; No. 42, p. 118.

Éwe, G.: In 12 lots of terpeneless oil of lemon examined, aldehydes, calculated as citral, ranged from 20.2 per cent to 67.9 per cent.—J. Am. Pharm. Assoc. 1919, v. 8, p. 755.

OLEUM MENTHÆ PIPERITÆ.

Houston, D. F.: The following is the standard for oil of peppermint recognized by the U. S. Department of Agriculture: "Oil of peppermint is the volatile oil obtained from peppermint, and contains not less than 50 per cent by weight of menthol."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 16.

Anon.: The normal annual production of peppermint oil in the United States is estimated at 350,000 pounds. Last year's yield is stated to amount to only 75,000 pounds.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 11.

Polak's Frutal Works: Oil of peppermint distilled from peppermint grown in the medicinal herb gardens at Walcheren was found to be similar in taste and flavor to the American oils distilled from leaves grown in Wayne Co., Mich., U. S. A. Data showing the physical and chemical constants of the oil are given.—Pharm. Weekblad, 1919, v. 56, p. 41–42.

Elze: An oil obtained from a plant which appears to be a cross between *Menthæ piperita* and *Menthæ pulegium* had a specific gravity of 0.920 and an optical rotation of +8°. The oil contained

40 per cent of total alcohols but was poor in menthol and rich in pulegone.—Chem. Ztg. 1919, v. 43, p. 740.

Shinosaki: Data are given showing the physical and chemical constants of Chinese peppermint oil. The oil contained 70.75 per cent of free menthol, 8.08 per cent combined menthol, and 12.88 per cent of ketones as menthone.—J. Chem. Ind. Tokyo, 1919, v. 22, p. 349–382, 458–463.

Lyons, A. B.: Two formulas for calculating the percentage of total menthol in oil of peppermint from the U. S. P. assay are presented.—J. Am. Pharm. Assoc. 1919, v. 8, p. 10–11.

Anon.: The analytical constants of nearly 200 samples of oil of peppermint obtained from various sources are presented in tabular form.—Evans' An. Notes, 1919, p. 76–77.

OLEUM MYRCIÆ, N. F.

Watts, Sir Francis: An account of the bay-oil industry in Montserrat. Data on yield, specific gravity, and phenol content are presented.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 213–214.

OLEUM PINI PUMILIONIS.

Andés, L. E.: A description of the distillation of the oils of the pine and fir needles in Europe and America.—Deutsch. Parfumerie Ztg. v. 5, p. 45–47, through Chem. Zentralbl. 1919, v. 4, p. 88.

OLEUM SANTALI.

Anon.: The Austrian minister of public health has issued a warning against the use of "West Indian sandalwood oil," which is obtained from *Amyris balsamifera*, and which is stated to give rise to dangerous secondary effects owing to the presence of irritating terpenes.—Chem. & Drug. 1919, v. 91, No. 22, p. 49.

Lane-Poole, C. E.: Western Australian sandalwood oil obtained from *Fusanus spicatus* is found to be practically identical, chemically and pharmacologically, with that obtained from other sources of supply.—Bull. Imp. Inst. 1919, v. 17, p. 109–111.

Anon.: The analytical constants of 180 samples of East Indian sandalwood oil examined were found to be as follows: Specific gravity, 0.973 to 0.982; optical rotation −14° to −21°; refractive index, 1.5023 to 1.5093; total santonal 92–98 per cent. Data are also given for West Indian and West Australian sandalwood oils.—Evans' An. Notes, 1919, p. 85–86.

OLEUM SASSAFRAS.

Anon.: The production of sassafras oil is confined to the United States. In 1913 the total production was estimated to be about

90,000 pounds. The production in 1917 was estimated to be the same amount. Tennessee is now the leading producing State.—Am. Drug. 1919, v. 67, No. 12, p. 28.

OLEUM TEREBINTHINÆ.

Anon.: Indian frankincense is stated to be a new source of oil of turpentine for use in India. The frankincense is obtained by making incision in the stems of *Boswellia serata*, a tree widely distributed throughout the dry-zone forests of Central India.—J. Ind. & Eng. Chem. 1919, v. 11, p. 591.

Halse and Samuelsen: Notes on the characteristics of Norwegian turpentine obtained as a by-product in the production of sulphide cellulose.—Apoth.-Ztg. 1918, v. 33, p. 258, through Pharm. Zentralh. 1919, v. 60, p. 36.

Shinosaki, Y.: The analytical values and properties of the oil of turpentine obtained from the Japanese pine are given.—J. Chem. Ind. Tokyo, 1918, v. 21, p. 763–774, through J. Soc. Chem. Ind. 1919, v. 38, p. 21A–22A.

Aschan, Ossian: A new terpene hydrocarbon has been obtained by the fractional distillation of Finnish turpentine with steam. It is a bicyclic terpene closely related to pinene.—Technikern, 1918, p. 3, through Chem. Abstr. 1919, v. 13, p. 2760.

Taylor, Ethel M.: Data relative to the absorption of the halogens by turpentine are given.—Analyst (The), London, 1919, v. 44, p. 401–402.

Tausz, J.: New tests for the detection of adulterants in oil of turpentine are described.—Chem. Umschau, 1918, v. 90, through Pharm. Zentralh. 1919, v. 60, p. 47.

Anon.: Of 4 samples of turpentine oil examined, 2 were rejected, as they did not comply with the U. S. P. requirements.—Rep. Wisconsin D. & F. Com. 1919, June, p. 41.

OLEATA.

Moore: Nicotine oleate is recommended as a contact insecticide. It can be prepared from any nicotine preparation by admixture with oleic acid, 2½ parts of a 40 per cent solution of nicotine combined with 1¾ parts of commercial oleic acid. An abstract.—Chem. & Drug. 1919, v. 91, No. 2, p. 50.

OLEATUM HYDRARGYRI.

White, William R.: High temperature in preparing oleate of mercury results in the formation of a very dark product. The addition of a small amount of N/50 KOH volumetric solution during trituration produces a beautiful white oleate.—J. Am. Pharm. Assoc. 1919, v. 8, p. 557.

OLEORESINA.

Du Mez, A. G.: A descriptive review of the galenical oleoresins. A general discussion is followed by a detailed consideration of the individual oleoresins. A bibliography is appended.—Trans. Wis. Acad. Sci., Arts and Letters, 1919, v. 19, p. 907–1194.

OLEORESINA ASPIDII.

Ishio, M., and Shimidzu, M.: The wild male fern, *Dryopteris pseudo filix mas* Nakai et Kodama, formerly regarded as identical with the European male fern, has been subjected to an investigation by the authors. The ethereal extract has the following properties: specific gravity at 15° C., 1.1415; refractive index at 40°, 1.4826; ash, 0.23 per cent; crude filicin, 49.51 per cent.—J. Pharm. Soc. Japan, 1919, No. 453, p. 905.

Perrin: A method for the determination of the crude filicin and filicic acid content of oleoresin of aspidium is described. The method for crude filicin is essentially that of the Ph. Brit.—J. pharm. et chim. 1919, v. 19, p. 65–66.

Elliot, G.: A formula for the preparation of an emulsion of oleoresin of male fern is given as follows: oleoresin of male fern, ½ drachm; olive oil, 2 drachms; powdered acacia, 2 drachms; cinnamon water, 1½ ounces.—Pharm. J. Lond. 1919, v. 102, p. 237. For comments on the advisability of prescribing oils with oleoresin of male fern, see W. T. Stevenson, ibid., p. 278.

OPII PULVIS.

Kofler, L.: Notes on microchemical methods for the evaluation of powdered opium. Adulteration with powdered poppy capsules is reported.—Ztschr. allgem. österr. Apoth.-Ver. 1918, v. 56, p. 322, through Pharm. Zentralh. 1919, v. 60, p. 492–493.

OPIUM.

Georgiades: The area devoted to the cultivation of the opium poppy in Egypt is stated to have decreased from 5,000 acres in 1833 to 1,500 acres in 1917. The usual morphine content of the opium produced is about 7 per cent, but 10 and even 12 to 15 per cent has been observed.—Répert. Pharm. 1918, v. 74, p. 345.

Murray, B. L.: On account of the war in Europe, Turkish opium became unobtainable, and it was necessary to make use of the Persian opium placed upon the market. Persian opium differs somewhat in nature from that of the Turkish variety, so that processes for the manufacture of opium preparations had to be revised.—Am. Drug. 1919, v. 67, No. 1, p. 28.

Horton, George: A consular report describing the conditions of the opium crop in Macedonia. It is stated that only approximately 4,230 pounds were produced in 1918.—Com. Rep. 1919, No. 15, p. 277–278.

Swirlowsky, E.: An account of the production of opium in Turkestan. Data are given showing the yield of opium, its morphine content, and the quantities produced.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 316–333.

Wong, Ying C.: A short historical account of the cultivation of the opium poppy in China, the origin and development of opium smoking, and the suppression of the traffic in this drug.—Am. J. Pharm. 1919, v. 91, p. 776–784.

Anon.: The analyses of 102 samples of opium from different parts of India completed at the Imperial Institute showed that about one-half of them were equal in morphine content to the best Turkish and Persian opium, while another 25 per cent could be used for special medicinal purposes.—Bull. Imp. Inst. 1919, v. 17, p. 1–14; Pharm. J. Lond. 1919, v. 103, p. 132.

Fleissig: It is reported that opium with a morphine content of 15.5 per cent can be produced in Hungary, and that opium containing as much as 22 per cent of morphine has been produced.—Schweiz. Apoth.-Ztg. 1918, v. 56, p. 237.

Anon.: $14,000,000 worth of opium bought by the Chinese Government from foreign opium merchants is to be burned, according to a cablegram from Peking received at the Chinese Legation at Washington.—Pacific Pharm. 1919, v. 12, p. 235.

Anon.: A table and charts are presented showing the fluctuation in the prices of opium and morphine during the period of the war, 1914–1919.—Drug & Chem. Markets, 1919, v. 5, No. 25, p. 5–6.

Jermstad, Axel: A contribution to the history of the chemical study of opium.—Répert. Pharm. 1919, v. 30, p. 321–329, 387–390, 399–402.

Denigès, G.: A note on the application of the apomorphine reaction of Grimbert-Leclere to the detection of the morphine group of alkaloids. The reaction depends for its usefulness on the production of a color upon the addition of sodium acetate and mercuric chloride to a solution of these alkaloids.—Bull. soc. pharm. Bordeaux, 1918, v. 56, p. 185.

Wherry, Edgar T., and Yanovsky, Elias: The crystallography and partial optical properties are described for morphine monohydrate, codeine, codeine monohydrate, codethylene monohydrate, and diacetyl-morphine.—J. Washington Acad. Sci. 1919, v. 9, p. 505–513.

Braun, Julius: Researches on the morphine alkaloids. VI. The relative stability of the nitrogen ring in morphine.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 1999–2011.

Rakshit, J. N.: The properties of porphyroxine, an alkaloid isolated from Indian opium, are described.—J. Chem. Soc. Lond. 1919, v. 115, p. 455.

Freund, M.: Researches on the constitution of the alkaloids of the morphine group.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 110–113; see also Chem. Abstr. 1919, v. 13, p. 2512–2514.

Lautenschläger, L.: Studies on the preparation and physiological action of some derivatives of meconic acid. None of the substances synthesized manifested any definite narcotic action.—Biochem. Ztschr. 1919, v. 96, p. 73–86.

Anon.: Some observations on the microchemical determination of morphine in opium by means of acidified Mayer's reagent.—Ztschr. allgem. österr. Apoth.-Ver. 1918, v. 72, p. 47, through Pharm. Zentralh. 1919, v. 60, p. 262.

Tingle, Alfred: A description of a method for the determination of morphine in opium and in mixtures containing opium. Data obtained in the analysis of opium and of some preparations into which it enters are also presented.—Am. J. Pharm. 1919, v. 91, p. 851–861.

Annett, H. E., and Singh, H.: An investigation of the effect of morphine concentration on the results of the morphine assay of the Ph. Brit.—Analyst. (The), London, 1919, v. 44, p. 41.

Heiduschka, A., and Faul, M.: The solubility of morphine in ammonia water is found to be proportional to the concentration of the hydroxyl ions of the solution. From the solubility results obtained, a formula has been elaborated for making corrections in the opium assay.—Arch. Pharm. 1917, v. 255, p. 441–466. See also J. Soc. Chem. Ind. 1919, p. 737a.

Rakshit, Jitendra N., and D'Costa, Frank J.: A study of the B. P. methods of 1898 and of 1914 for the determination of morphine in Indian opium in comparison with the polarimetric method.—Analyst (The), London, 1919, v. 44, p. 337–341.

von Friedrichs, O.: The use of ethyl acetate in place of ether for determining the morphine in opium by the methods of the German, Swedish, Belgian, and other pharmacopœias is recommended. The difference in the results obtained using ether and ethyl acetate was usually less than 0.1 per cent.—Pharm. Zentralh. 1918, v. 59, p. 329–330, through J. Soc. Chem. Ind. 1919, v. 38, p. 197A.

Anon.: A discussion of the Ph. Brit. method for the assay of opium. Analytical data obtained in the examination of many samples of Indian, Persian, and Egyptian opium are presented in the form of tables.—Evans' An. Notes, 1919, p. 71–75.

van der Wielen, P.: Notes on the quantitative estimation of narcotine, codeine, and morphine in opium.—Pharm. Weekblad, 1919, v. 56, p. 1122–1123.

Dott, D. B.: A brief discussion of two of the most generally used methods for isolating the alkaloids from opium, with special reference to morphine, codeine, thebaine, narcotine, papaverine, and narceine.—J. Soc. Chem. Ind. 1919, v. 37, p. 430–431R.

Anon.: Two patented methods for the extraction of total opium alkaloids are described.—Chem. Ztg. 1918, v. 42, p. 198, through Pharm. Weekblad, 1919, v. 56, p. 92.

Fühner, H.: A critical discussion of opium, "pantopon," "laudanon," and "narkophin" with respect to their use as therapeutic agents.—Therap. Monatsh. 1918, v. 32, p. 409–415, through Chem. Zentralbl. 1919, v. 2, p. 304.

Anon.: A description of a method for preparing a solution of the total alkaloids of opium which is but slightly colored. An abstract.—Pharm. Zentralh. 1919, v. 60, p. 95.

OVI ALBUMEN RECENS, N. F.

McClendon, J. F., and Prendergast, H. J.: A report of studies on the ultramicroscopy of egg albumen.—J. Biol. Chem. 1919, v. 38, p. 549.

Pictet, A., and Cramer, M.: A chemical study of the products obtained by distilling egg albumen under reduced pressure.—Helv. Chim. Acta, 1919, v. 2, p. 188; J. pharm. et chim. 1919, v. 20, p. 282–284.

Dakin, Henry D., and Dale, Henry H.: A comparison of the crystalline egg-albumins of the hen and duck with reference to chemical structure and antigenic specificity.—Biochem. J. 1919, v. 13, p. 248–257.

Éwe, George E.: A convenient apparatus for the disintegration of egg albumen in the assay of pepsin by the U. S. P. process is described. Illustrated.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 173–175.

OVUM GALLINACEUM, N. F.

Lythgoe, Herman C.: Tests for distinguishing between storage and fresh eggs are described.—Am. Food J. 1919, v. 14, No. 1, p. 15.

Jenkins, M. K.: A discussion of the changes taking place in eggs during cold storage. The ammoniacal nitrogen is found to increase during storage, the increase being the greatest during the early part of the storage period. The amount of ammoniacal nitrogen present is a good index of chemical deterioration.—Bull. U. S. Dept. Agric. 1919, No. 775, p. 1–36.

Birckner, Victor: The zinc content of some food products. Hens eggs were found to contain about 1 milligram of zinc per egg.—J. Biol. Chem. 1919, v. 38, p. 191-203.

OXYGENIUM.

Banfield, R. C. A.: Notes on the preparation of oxygen from air. Preliminary cooling of the compressed air shortens the initial period before the production of liquid oxygen and enables a lower pressure to be used.—Schweiz. Chem.-Ztg. 1919, v. 1, p. 9–18, through J. Soc. Chem. Ind. 1919, v. 38, p. 413A.

Anon.: A notice calls attention to a volume by Émile Barbet entitled *Rectification de l'air liquide. Séparation et purification des gaz de l'atmosphere.*—Chem. Abstr. 1919, v. 13, p. 639.

PANCREATINUM.

Francis, J. M.: Data obtained in testing the diastasic power of pancreatin by the U. S. P. method, and the tryptic activity by the fibrin digestion method and the casein method of Fuld-Gross are presented and discussed.—Proc. Am. Drug Mfg. Assoc. 1919, p. 243-249.

Carnot, P., and Mauban, H.: A color reaction for the detection of steapsin in commercial pancreatin is based on the production of a copper soap.—Compt. rend. soc. biol. 1918, v. 81, p. 98–101.

Sherman, H. C., and Neun, Dora E.: An investigation of the proteolytic activity of pancreatic amylase preparations.—J. Am. Chem. Soc. 1919, v. 41, p. 1855–1862.

Topliss, William G.: From experiments, it is concluded that if pancreatin ever performs any digestive service, when taken unprotected, in the stomach, it occurs within the first ten minutes thereafter and is concerned principally with the conversion of starch by amylopsin into maltose, before the stomach has acquired a marked degree of acidity.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 273–274.

Wago, H.: A report of further studies concerning the essential nature of antitryptic activity of normal serum and the physiologic function of pancreatic ferments.—Arch. Int. Med. 1919, v. 23, p. 33–35, 251–268.

PAPAVERIS FRUCTUS, N. F.

Heiduschka, A.: An investigation of the morphine content of poppy capsules. The morphine content of 2 commercial samples of ripe capsules was found to be 0.017 and 0.0681 per cent, respectively.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 447–448.

Lautenschläger, Ludwig: A report of experimental studies in the application of the diazo reaction of morphine to the quantitative determination of morphine in the poppy capsule.—Arch. Pharm. 1919, v. 257, p. 13–18.

PARAFFINUM.

Campbell, A., and Wilson, W. J.: A review dealing with paraffin wax and its manufacture.—J. Inst. Petroleum Tech. 1919, v. 5, p. 106–136, through Chem. Abstr. 1919, v. 13, p. 1636.

Bayer & Co.: German patent No. 296,741 describes the preparation of paraffins by converting the alcohols into formates and heating under pressure.—Chem. Abstr. 1919, v. 13, p. 325.

Elborne, W.: British patent No. 128,239. Powdered or granulated paraffin is obtained by subjecting paraffin to a grinding, crushing, disintegrating operation in the presence of ethyl or methyl alcohol.—Chem. Abstr. 1919, v. 19, p. 3009.

Schwarz, F.: Notes on the determination and fractional separation of paraffin with methyl ethyl ketone.—Mitt. Materialprüfungsamt, 1918, v. 36, p. 241–246, through Chem. Abstr. 1919, v. 13, p. 3313.

Gluud, W.: Analytical data are given showing the composition of coal paraffin.—Ber. deutsch. chem. Gesellsch. 1919, v. 52B, p. 1039–1053.

von Kozicki, G., and von Pilat, S.: Heat of fusion of paraffin wax. It was found that the latent heat of fusion ranges from 38.9 to 43.9, increasing with rise of temperature, solidifying point, and molecular weight.—Chem. Ztg. 1918, v. 42, p. 147, through J. Soc. Chem. Ind. 1918, v. 37, p. 681A.

PARAFFIN FILMS (NONOFFICIAL).

Heill, A. J.: The author suggests the following formula as a substitute for ambrine: resorcin, 1 part; oil of eucalyptus, 2 parts; olive oil, 5 parts; vaseline, 25 parts; hard paraffin, 67 parts.—Rev. Hig. y Sanidad Pecuarias (Spain), 1917, v. 7, p. 324; Vet. Rec. 1918, v. 30, p. 484, through Exper. Sta. Record, 1919, v. 40, p. 780.

Pratt, E. F.: Some notes on the treatment of wounds and burns by means of paraffin.—Brit. M. J. 1919, v. 1, p. 243–244.

PARALDEHYDUM.

von Bruchhausen, F.: An investigation of methods for the determination of acetaldehyde in paraldehyde. It is concluded that Richter's sulphite method is best suited for this purpose.—Apoth.-Ztg. 1919, v. 34, p. 428–429.

PASTA ZINCI MOLLIS, N. F.

White, William R.: When Unna's soft zinc paste is made according to N. F. directions, a putty-like mass is produced with the separation of lime water. If the linseed oil and lime water are thoroughly saponified first and the mixed zinc oxide and calcium carbonate then added gradually, a permanent soft paste is obtained.—J. Am. Pharm. Assoc. 1919, v. 8, p. 557.

PEPSINUM.

Davis, Lewis, and Merker, Harvey M.: Pepsin. I. A study of the chemical changes occurring in the purification of pepsin.—J. Am. Chem. Soc. 1919, v. 41, p. 221-228; Am. J. Pharm. 1919, v. 91, p. 233–241.

Funck, Erich, and Möller, Hans: Pepsin should meet the following requirements: proteolytic activity, normal; ash content 4 to 6 per cent; soluble in water with slight turbidity; soluble in 0.2 per cent hydrochloric acid to a clear solution with no gas formation; soluble in 40 per cent alcohol; sodium chloride content, low; acidity low.—Pharm. Zentralh. 1919, v. 60, p. 517–518.

Francis, J. M.: Data obtained in the testing of 4 samples of pepsin according to U. S. P. specifications are presented in tabular form. A discussion of these data by various persons is also included.—Proc. Am. Drug Mfg. Assoc. 1919, p. 243–249.

van Hasselt, J. F. B.: Notes on the preparation and evaluation of pepsin.—Pharm. Weekblad, 1919, v. 56, p. 1682–1685.

Arthus, Maurice, and Siegwart: A method for the evaluation of pepsin is described. The tests are made on an acid solution of gelatin. An abstract.—J. pharm. et chim. 1919, v. 19, p. 30–31.

Warren, L. E.: A specimen of pepsin 39 years old was found to yield 48.8 per cent of ash and to have a proteolytic strength of 1–500.—J. Am. Pharm. Assoc. 1919, v. 8, p. 734–735.

Ringer, W. E.: Researches with Pekelharing's pepsin. V. The inhibition of the action of pepsin by the bile acids.—Arch. Néerland physiol. 1919, v. 3, p. 349–360, through J. Chem. Soc. Lond. 1919, v. 116, part 1, p. 419.

Gross, O.: An investigation of the value of commercial pepsin preparations. Of 13 samples of wine of pepsin examined, all were almost or entirely devoid of peptic activity. Other pepsin preparation examined showed a similar condition.—Deutsch. med. Wchnschr. 1919, v. 45, p. 823–825.

Northrop, J. H.: A study of the effect of various acids on the digestion of proteins by pepsin.—J. Gen. Physiol. 1919, v. 1, p. 607–612.

Biedermann: Notes on the detection of pepsin in peptic digestion. A suspension of coagulated egg white in water can be employed for detecting a small amount of pepsin. The turbidity of the solution quickly clears up on digestion with a trace of pepsin and hydrochloric acid.—Fermentforsch. 1917, v. 2, p. 1, through J. Chem. Soc. 1919, v. 116, p. 100.

PETROLATUM.

Armanni, G., and Rodano, A. G.: Existing methods of distinguishing between the various qualities of vaseline depend upon the determination of viscosity and paraffin content. These methods require special apparatus and careful manipulation to obtain accurate results. A simple method is described.—Ann. chim. applicata, 1919, v. 12, p. 50–51.

PETROLATUM ALBUM.

Hommell, P. E.: The U. S. P. should direct that white vaseline be kept in a dark place, as sunlight not infrequently causes a change in color.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

PETROLATUM LIQUIDUM.

Utz: Some notes on liquid paraffin, with special reference to the standards prescribed by the Ph. Germ.—Pharm. Zentralh. 1919, v. 60, p. 257–260.

Clark, A. H.: From experiments, it is concluded that the iodine absorption number of liquid petrolatum is practically zero, although traces of iodine disappeared in every test.—J. Am. Pharm. Assoc. 1919, v. 8, p. 611–612.

Kraus: A note calls attention to severe symptoms of poisoning produced by the injection of impure liquid paraffin.—Pharm. Ztg. 1918, v. 63, p. 459, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 141.

Enz: The author warns against the use of so-called "white" vaseline oil of Austrian origin for subcutaneous injections. Its properties are described.—Südd. Apoth.-Ztg. 1918, v. 58, p. 350, through Chem. Zentralbl. 1919, v. 2, p. 304.

Müller, O.: A report of 12 cases of severe illness resulting from injections of impure paraffin.—Deutsch. med. Wchnschr. 1919, v. 45, p. 46.

PETROSELINUM.

Styger, Jos.: A description of the anatomy of the fruits of *Petroselinum sativum*.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 69–70.

PETROXOLINA.

Hommell, P. E.: Creosote petrox and venice turpentine petrox can be dispensed with. A petrox containing iodine with methyl salicylate would be a valuable addition to the list of petroxolins.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

PETROXOLINUM LIQUIDUM, N. F.

Scoville, Wilbur L.: Complaints have been made to the effect that liquid petroxolin is not always clear when prepared according to the N. F. directions. This is probably due to the fact that it is difficult to obtain stronger ammonia water of full strength. Experiments with the use of potassium or sodium hydroxide are desirable to determine whether more certain results may be obtained than when stronger ammonia water is used.—J. Am. Pharm. Assoc. 1919, v. 8, p. 745–746.

PHENOL.

Peterkin, A. G.: Some notes on the production of phenol in the United States.—J. Ind. & Eng. Chem. 1919, v. 11, p. 475.

Leroux, H.: It is recommended that the congealing point, rather than the melting point, should be the criterion selected in the official test for phenol. This is found to be 41° C. The melting point is usually given as 42° C., the Ph. Fr. gives 42.5° C. The presence of small amounts of water lowers the melting point. Phenol containing 2 per cent of water melts at 33.2° C.—J. pharm. et chim. 1919, v. 20, p. 88.

Versfeld, W.: A procedure for the determination of phenol by the bromine method is described.—Ztschr. anal. Chem. 1919, v. 56, p. 295; Pharm. Zentralh. 1919, v. 60, p. 549.

Roberts, J. G.: A two-drum lot of phenol was rejected because it was of poor appearance. One drum was quite dark colored, while the other was both dark and dirty.—J. Am. Pharm. Assoc. 1919, v. 8, p. 755.

von Friedrichs, O.: A solution of menthol (40 per cent), phenol (40 per cent), and eugenol (20 per cent) is described in the latest edition of the Swedish pharmacopœia under the name "tinctura antiodontalgica." A formula is given for calculating the phenol content of the mixture from its optical activity.—Arch. Pharm. 1919, v. 257, p. 72–78; J. Soc. Chem. Ind. 1919, v. 38, p. 439A.

PHENOL IODATUM, N. F.

Cofman, Victor: Experimental proof is given to the effect that hypoiodous acid is the active substance in the iodination of phenols with iodine or its compounds.—J. Chem. Soc. Lond. 1919, v. 115, p. 1040–1049.

PHENOLPHTHALEINUM.

Bouvet, M.: Formulas are given showing the composition of various types of tablets for medicinal use containing phenolphthalein. A list is also given of the phenolphthalein derivatives that may be present. The method used in the analysis of these tablets is based on Kollo's second technique.—Bull. sc. pharmacol. 1919. v. 26, p. 281–288.

Holt, Thomas: Of 4 samples of phenolphthalein examined, 1 was not of U. S. P. quality.—Rep. Connecticut D. & F. Com. 1919, p. 21.

PHENYLIS SALICYLAS.

Roberts, J. G.: One sample of phenyl salicylate examined was considered of unacceptable quality because of a yellowish color.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 89; J. Am. Pharm. Assoc. 1919, v. 8, p. 755.

PHOSPHORUS.

Peters, Hermann: Information of historical interest concerning the discovery of phosphorus and its application to technical purposes is given.—Prometheus, 1919, v. 30, p. 249–251, through Chem. Abstr. 1920, v. 14, p. 1251.

Blount, Bertram: In handling phosphorus in cases in which water can not be conveniently utilized, nitrogen in liberal quantities can be used with safety.—Analyst, Lond. 1918, v. 43, p. 291–292.

Tarugi, N.: A report of studies on the toxicology of phosphorus.—Boll. chim.-farm. 1919, v. 58, p. 141–147.

Simonds, J. P.: A discussion of the mechanism of the protection of carbohydrate diet in phosphorus and chloroform poisoning.—Arch. Int. Med. 1919, v. 23, p. 362–379.

PHYSOSTIGMA.

Éwe, George E.: The methods for the assay of physostigma and its preparations given in the U. S. P. VIII and the U. S. P. IX are unsatisfactory. A modified method is described.—J. Am. Pharm. Assoc. 1919, v. 8, p. 1006–1009.

Éwe, G.: Of 8 samples of physostigma examined, 4 were below standard.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

PILOCARPINÆ HYDROCHLORIDUM.

Anon.: A study of the relative permanency in moist air of pilocarpine hydrochloride and pilocarpine nitrate shows that the latter is practically stable, while the former is so deliquescent as to be troublesome in pharmacy. The deletion of the former from the U. S. P. is recommended.—Rep. Chem. Lab. Am. M. Assoc. 1919, v 12, p. 96–97.

PILOCARPUS.

Roberts, J. G.: Two broker's samples of pilocarpus examined contained 22 per cent of stems. The U. S. P. permits not more than

5 per cent. The alkaloidal content of the samples was entirely satisfactory.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 89.

Éwe, G.: Of 4 samples of pilocarpus examined, 1 was below standard.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

PILULÆ.

Lembcke: Simple syrup is stated to be the best excipient for use in the preparation of most pills, and to be especially valuable in the formation of pills of quinine and iron.—Pharm. Ztg. 1919, v. 64, p. 224.

Anon.: Pills of silver nitrate may be prepared without difficulty, using the following formula: silver nitrate 1.0, powdered tragacanth 0.3, kaolin 10.0, and a sufficient quantity of glycerin to make 100 pills. Talcum should be used in rolling them out.—Pharm. Centralh. 1918, p. 301, through Schweiz. Apoth.-Ztg. 1919, v. 56, p. 142.

Anon.: A note calls attention to the deterioration of arsenic pills due to the action of a green mold, which was identified as *Aspergillus glaucus*. The As_2O_3 was reduced to $AsH(C_2H_5)_2$, the odor of which was quite evident.—Pharm. Ztg. 1919, v. 64, p. 650.

PILULÆ FERRI CARBONATIS.

Blumenschein, F. J.: The use of sodium carbonate in the preparation of Blaud's pills, although permitted by the U. S. P., gives unsatisfactory results. This is due to the fact that the sodium sulphate formed takes up water of crystallization, thereby removing the moisture necessary to produce adhesion of the materials.—Pennsylvania Pharm. Assoc. 1919, through Western Druggist, 1919, v. 41, p. 266.

PIPER.

Houston, D. F.: The following is the standard for black pepper recognized by the U. S. Department of Agriculture: "Black pepper is the dried immature berry of *Piper nigrum* L. It yields not less than 6.75 per cent of nonvolatile ether extract, not less than 30 per cent of starch, not more than 7 per cent of total ash, nor more than 1.5 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 14.

Hart, Fanchon: A microscopical method for the quantitative determination of vegetable adulterants in pepper is described and analytical data are given.—J. Am. Pharm. Assoc. 1919, v. 8, p. 1032–1034.

Lendner, A.: Notes on the adulteration of pepper with powdered "arancini" (orangettes), mixed with powdered pimento. A method for detecting this form of adulteration is described.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 591–593.

Hartel, F.: Black pepper has a glucose value of at least 30 per cent when pure and free from shells.—Ztschr. Unters. Nahr.-u. Genussm. 1918, v. 35, p. 445.

PIX LITHANTHRACIS, N. F.

Stevens, A. B.: A synopsis of a paper on coal tar and coal-tar products.—J. Soc. Dyers Colourists, 1919, v. 34, p. 56.

Spalteholz, W.: The determination of the water content of tar. The apparatus and method is described in detail.—Chem. Weekblad, 1918, v. 15, p. 1546–1458. See also P. Smit, ibid. 1919, v. 16, p. 852–854.

Knublauch: A method for the determination of naphthalene in tars consists in titrating the picrate directly with alkali. An abtract.—J. Soc. Chem. Ind. 1918, v. 37, p. 458A.

Colman, H. G., and Yeoman, E. W.: A general account of the methods worked out by the authors for the determination of benzene, toluene, carbon disulphide, paraffins, and naphtha in coal-tar and similar products.—J. Soc. Chem. Ind. 1919, v. 38, p. 57–68T.

PLUMBI ACETAS.

Camus, E., et al.: U. S. patent No. 1,297,792 describes the preparation of lead acetate by heating ethyl acetate with litharge in the presence of water.—Chem. Abstr. 1919, v. 13, p. 1595.

Morris, R. L.: Modifications of the Ph. Brit. directions for the determination of lead in lead acetate are given. Experimental data obtained by the use of this method are presented.—Chem. & Drug. 1919, v. 91, No. 11, p. 52–54.

PLUMBI CARBONAS, N. F.

Scott, James: A review dealing with the composition and properties of white lead, with special reference to some microscopical features.—Chem. Trade J. 1919, v. 65, p. 327–328, through Chem. Abstr. 1920, v. 14, p. 130.

U. S. Interdepartmental Committee on Paint Specification Standardization: Specifications recommended for basic carbonate of white lead, dry and paste, are presented.—Circ. Bur. Stand. 1919, No. 84.

PLUMBI IODIDUM, N. F.

Scholar, Abel: The Ph. Brit. test for the solubility of lead iodide in ammonium chloride solution is indefinite and should be modified in order to obtain the desired results.—Chem. & Drug. 1919, v. 91, No. 33, p. 71.

PLUMBI OXIDUM.

Morgan, Walter V.: A colorimetric method for the determination of lead dioxide in litharge depends on the fact that aniline is oxidized to aniline purple by the former. The intensity of the color is proportional to the lead dioxide content.—J. Ind. & Eng. Chem. 1919, v. 11, p. 1055.

Anon.: Samples of lead oxide are occasionally found which contain from 0.2 to 1 per cent of free metallic lead.—Evans' An. Notes, 1919, p. 62.

PLUMBI OXIDUM RUBRUM, N. F.

Edwards, W. F.: A comparison of four well-known methods for the determination of the "true red lead" content of commercial red lead. The results obtained are presented and discussed.—Chem. Met. Eng. 1919, v. 20, p. 35–37, through Chem. Abstr. 1919, v. 13, p. 382.

PODOPHYLLUM.

Strouse, Lee: Notes on the history and use of podophyllum.—Ellingwood's Therap. 1919, v. 13, p. 320–322.

Éwe, G.: Of 18 samples of podophyllum examined, 4 were below standard.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

POTASSII BITARTRAS.

Anon.: Attention is directed to the fact that many samples of potassium bitartrate contain excessive amounts of lead and arsenic. Sixty-one of 111 samples examined contained over 20 parts per million of lead.—Evans' An. Notes, 1919, p. 46–48.

McGill, A.: A report of the analysis of 161 samples of cream of tartar. It is recommended that a degree of purity represented by 90 per cent of actual bitartrate of potash be made a legal minimum for cream of tartar. Only 9 per cent of the samples examined fell below this proposed standard.—Bull. Lab. Dept. Trade & Commerce, Ottawa, Canada, 1919, No. 426.

POTASSII BROMIDUM.

Wasicky, R.: Microchemical methods for the identification of potassium bromide are described.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 323.

Prescher, Johannes: For carrying out the tests of the Ph. Germ. for potassium bromide and iodide, the use of freshly prepared chlorine water is recommended. The extemporaneous preparation of this water by the action of hydrochloric acid on potassium chlorate is suggested.—Pharm. Zentralh. 1919, v. 60, p. 207.

Funk, E.: A sample of potassium bromide examined contained potassium iodide, iron salts, and 1.84 per cent of potassium carbonate.—Zentralbl. f. Pharm. 1919, v. 15, p. 91, through Pharm. Zentralh. 1919, v. 60, p. 565.

Anon.: A report of a fatal case of poisoning due to the ingestion of four ounces of potassium bromide in the course of four days.—Chem. & Drug. Lond. 1919, v. 91, No. 50, p. 49.

POTASSII CARBONAS.

Wasicky, R.: The identification of potassium carbonate by microchemical methods is described.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 323.

Roberts, J. G.: One sample of potassium carbonate examined was 3 per cent low in strength, contained an excess of heavy metals and was insufficiently soluble in water.—J. Am. Pharm. Assoc. 1919, v. 8, p. 756.

Funk, E.: A sample of potassium carbonate examined contained 3.44 per cent of chlorides.—Pharm. Zentralh. 1919, v. 60, p. 565; Zentralbl. f. Pharm. 1919, v. 15, p. 91.

POTASSII CHLORAS.

Mayer, Joseph L.: In the assay of potassium chlorate, less than 0.1 gram of potassium chlorate should be taken or else the quantity of acidulated ferrous sulphate should be increased.—Proc. New York Pharm. Assoc. 1919, p. 58.

POTASSII CHLORIDUM, N. F.

Wasicky, R.: Descriptions of microchemical methods for the identification of potassium chloride are given.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 323–324.

POTASSII HYDROXIDUM.

Wasicky, R.: Methods for the identification of potassium hydroxide are described.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 324.

Bellucci, I., and Lucchesi, F.: Notes on the titration of alkali hydroxides containing aluminium oxide as an impurity.—Ann. chim. applicata, 1919, v. 11, p. 199–204.

POTASSII HYPOPHOSPHIS.

Anon.: Samples of potassium hypophosphite examined analyzed from 92.5 to 99 per cent. Phosphites were never present in quantities greater than 2½ per cent.—Evans' An. Notes, 1919, p. 78.

POTASSII IODIDUM.

Wasicky, R.: Descriptions of microchemical methods for the identification of potassium iodide.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 330.

Godfrin, P.: A new procedure for the quantitative determination of iodides is based on the reaction which takes place in the cold between potassium dichromate and the iodide in the presence of hydrochloric acid. The reduction of the chromic acid salt which follows bears a definite ratio to the iodine liberated. The latter is titrated with sodium thiosulphate volumetric solution.—Bull. soc. pharm. Bordeaux, 1919, v. 57, p. 16.

Avny: The intolerance evinced toward potassium iodide is due to a diminution in the alkalinity of the secretions. It may be counteracted by the simultaneous administration of large doses of sodium bicarbonate.—L'Union Pharm. 1919, v. 60, p. 35.

Anon.: Some samples of potassium iodide examined were found to contain considerable quantities of chlorides.—Evans' An. Notes, 1919, p. 78–79.

L. V.: Attention is called to the incompatibility of potassium iodide with codeine phosphate. Ten per cent solutions of these salts precipitate almost immediately.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 65–66.

Davis, David J.: A study of the effect of potassium iodide on experimental sporotrichosis. A prompt response to potassium iodide was observed in the case of rats.—J. Infec. Dis. 1919, v. 25, p. 124–131.

POTASSII NITRAS.

Gale, H. S.: An account of the history of the uses and sources of potassium nitrate.—Eng. Mining J. 1919, v. 107, p. 385–388, through Chem. Abstr. 1919, v. 13, p. 891.

Kippenberger, C.: A review of the technical methods in use at the present time for the manufacture of potassium nitrate and nitric acid.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 391–405.

Wasicky, R.: Microchemical methods for the identification of potassium nitrate are described. Illustrated.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 330.

Wogrinz, A., and Kuber, J.: The methods of Förster, Tschernobajeff, Winteler and Hendrixson for the determination of chlorate and perchlorate in saltpetre have been investigated. The procedure of Förster is stated to be utilizable without modification.—Chem. Ztg. 1919, p. 21, through Ann. chim. anal. chim. appl. 1919, v. 1, p. 159.

POTASSII PERMANGANAS.

Schlesinger, H. I., et al.: A study of the course of the reaction between manganese dioxide, potassium hydroxide, and oxygen, with reference to the manufacture of potassium permanganate.—J. Ind. & Eng. Chem. 1919, v. 11, p. 317–323.

Wasicky, R.: Descriptions of microchemical methods for the identification of potassium permanganate.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 329–330.

Cooper, E. A., and Howard, J. A.: Ordinary potassium permanganate may contain nitrogen as an impurity to such an extent as to vitiate the value of the albuminoid-ammonia test.—Biochem. J. 1919, v. 13, p. 25–27.

Gaubert, Paul: A report of a study of color phenomena in mixtures of potassium and ammonium perchlorate with potassium permanganate.—Compt. rend, acad. sc. 1918, v. 167, p. 491–494.

Éwe, G.: One lot of potassium permanganate was slightly low in strength, namely, 98.4 per cent, whereas the U. S. P. requires 99 per cent. It also contained an excessive proportion of insoluble matter.—J. Am. Pharm. Assoc. 1919, v. 8, p. 756.

Roberts, J. G.: Two lots of potassium permanganate examined were rejected because they were 2.3 and 1.07 per cent, respectively, low in strength.—J. Am. Pharm. Assoc. 1919, v. 8, p. 756.

POTASSII SULPHAS, N. F.

Janes, Frank W.: The extraction of potassium sulphate from Australian alunite is described.—Chem. Abstr. 1919, v. 13, p. 299.

Borntraeger, Arturo: A study of the reaction between neutral potassium sulphate and tartaric acid under various conditions.—Ann. chim. applicata, 1919, v. 12, p. 1–23.

PRUNUS VIRGINIANA.

Éwe, G.: One lot of wild cherry bark examined consisted of 65 per cent of official *Prunus serotina* and 35 per cent of another prunus bark, probably *Prunus demissa*, which was blackish externally, light brown on its inner surface, very thick and practically devoid of hydrocyanic acid.—J. Am. Pharm. Assoc. 1919, v. 8, p. 758.

PULSATILLA, N. F.

Farwell, O. A.: If the official plant from which pulsatilla is derived is to be considered as distinct from the European plant, the botanical source should be given as *Pulsatilla hirsutissima* (Pursh) Britton. If the present system is followed, the American species should be *Anemone patens* Linné var. *wolfgangiana* (Besser) Koch, or *Anemone hirsutissima* (Pursh) McMillan.—Drug. Circ. 1919, v. 63, p. 49.

Cohn, P.: One lot of pulsatilla examined consisted of only the tops, whereas the whole dried herb is specified.—J. Am. Pharm. Assoc. 1919, v. 8, p, 756.

PULVIS ACETANILIDI COMPOSITUS, N. F.

Hommell, P. E.: The formula for compound acetanilid powder is excellent, but the antacid action, as suggested by W. F. Kaiser, can be enhanced by adding some carbonate of ammonia, which also facilitates the absorption of the caffeine, and prevents cardiac depression.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

PULVIS AROMATICUS.

Hommell, P. E.: The U. S. P. should direct that aromatic powder be kept in well-closed containers.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

PULVIS EFFERVESCENS COMPOSITUS.

McGill, A.: A report of the examination of 198 samples of Seidlitz powders. The composition as provided by the U. S. P. and Ph. Brit. is given. One hundred and forty-four samples fell outside the acceptable limits of error.—Bull. Lab. Dept. Health, Ottawa, Canada, 1919, No. 433.

PULVIS GLYCYRRHIZÆ COMPOSITUS.

Roch, G.: To meet the war emergency, it is suggested that senna leaves be replaced by alder buckthorn bark in compound licorice powder.—Pharm. Ztg. 1919, v. 64, p. 258, through Chem. Zentralbl. 1919, v. 4, p. 54.

PULVIS RHEI COMPOSITUS.

Hommell, P. E.: The U. S. P. should direct that compound rhubarb powder be kept in well closed containers.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

PULVIS TALCI COMPOSITUS, N. F.

Anon.: A description of a method for the estimation of salicylic acid in Pulvis salicyl. cum Talco. The method consists of dissolving out the salicylic acid with ether and subsequently titrating with sodium hydroxide solution.—Pharm. Post, 1918, p. 73, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 33.

PYROGALLOL.

Boswell, Maitland C., and Dickson, J. V.: Studies on the fusion of some phenols and sulphonic acids with sodium hydroxide. The products resulting from the fusion of pyrogallol with sodium hydroxide are among the substances studied.—J. Am. Chem. Soc. 1918, v. 40, p. 1786–1793.

Weinland, R. F., and Bärlocher, Gustav: Descriptions are given of some compounds of pyrogallol with neutral salts, such as potassium acetate pyrogallol compound.—Ber. deutsch. chem. Gesellsch 1919, v. 52B, p. 147–159.

Kremann, Robert, and Zechner, Ludwig: The influence of substitution in the components on the equilibrium in binary solutions. XIV. A study of binary solution equilibria between pyrogallol and the aromatic amines or acid amides.—Monatsh. Chem. 1918, v. 39, p. 777–805; J. Chem. Soc. Lond. 1919, v. 116, part 2, p. 142.

PYROXYLINUM.

Angeli, A.: An investigation of the transformations of nitrocellulose in pyridine.—Atti accad. Lincei, 1919, v. 28, p. 20.

Lindsay, W. G.: U. S. Patent No. 1.292,819 describes the preparation of moldable pyroxylin by combining wet pyroxylin with benzyl benzoate.—Chem. Abstr. 1919, v. 13, p. 1017.

DuPont De Nemours & Co.: British patent No. 122,527. A solution of pyroxylin is prepared by the use of a solvent consisting of a mixture of alcohol and benzene with a small proportion (3 to 15 per cent) of ethyl or amyl acetate.—Chem. Abstr. 1919, v. 13, p. 1764.

QUILLAJA, N. F.

Anselmino, O.: Data relative to the ash content of quillaja bark of different degrees of fineness are presented. The ash content of the whole bark is given as 11 per cent.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 121.

Pittenger, P. S.: By experiments on dogs it is demonstrated that the saponin of quillaja is relatively nontoxic when administered by mouth.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 176.

QUINIDINA, N. F.

Heidelberger, Michael, and Jacobs, Walter A.: Syntheses in the cinchona series. I. The simpler cinchona alkaloids and their derivatives. Quinidine hydrochloride is among the compounds described.—J. Am. Chem. Soc. 1919, v. 41, p. 817–833.

Eschbaum, F.: A study of solutions with the aid of the guttameter has shown that quinidine depresses the surface tension to about the same extent as quinine.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 397–416; J. Chem. Soc. Lond. 1919, v. 116, part 1, p. 139.

QUININA.

Rabe and Kindler: A report of experiments in which a partial synthesis of quinine was effected. An abstract.—Chem. & Drug. 1919, v. 91, No. 17, p. 62.

Shulze, R.: A description of the operations followed in the production of quinine and its secondary alkaloids in German East Africa.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 486–504.

Salomen, H.: Three tests for the detection of quinine are described.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 273–275, through J. Soc. Chem. Ind. 1919, v. 38, p. 54A.

Ganassini, D.: Two new color reactions for quinine are described. In one of the tests a yellow color changing to purple-red is produced by the addition of a few drops of pyridine to a solution of a quinine salt containing an excess of chlorine water. A second test consists in the production of a red color by the addition of potassium ferricyanide after the formation of the green color in the thalleioquin test.—Il Polyclinico, 1917, v. 24, p. 344, through Arch. ital. biol. 1919, v. 69, p. 73.

Lipkin, I. J., and Whitley, E.: Delicate methods are described for the estimation and detection of quinine in animal tissues and liquids.—Ann. Trop. Med. and Par. 1918, v. 12, p. 223–258, through Exper. Sta. Record, 1919, v. 40, p. 382–383.

Kolthoff, I. M.: The method of Kerner for estimating the "by-alkaloids" in quinine and its salts gives satisfactory results only when applied to quinine sulphate. It is unreliable when applied to quinine bisulphate, quinine hydrochloride, and quinine base. A modification of the de Vrij's chromate method is recommended for the latter.—Pharm. Weekblad, 1919, v. 56, p. 451–459.

de Vrij: Some remarks on an article by I. M. Kolthoff dealing with the chromate test for the detection of other cinchona alkaloids in quinine salts.—Pharm. Weekblad, 1919, v. 56, p. 1687–1688.

Ramsden, W. et al.: Methods are described for the determination of quinine in animal tissues and liquids.—Ann. Trop. Med. Parasitol. 1918, v. 12, p. 223–258, through J. Chem. Soc. Lond. 1919, v. 116, part 1, p. 106.

Baur and Reveillet: A description of a clinical method for the determination of quinine in urine.—Union pharm. April 15, 1918, through Répert. Pharm. 1919, v. 30, No. 3, p. 37.

Boucher, Volcy: A note on quinine tablets in the French colonies, with special reference to their quinine content and solubility.—Bull. sc. pharmacol. 1919, v. 26, p. 66–74.

Cornwall, J. W.: The pharmacodynamics of quinine. II. A study of the effects of quinine on the adrenals, kidneys, and spleen of healthy rabbits. Damage to the similar elements of the adrenals and kidneys and an increase in the rate of disintegration of the red blood cells in the spleen were observed.—Indian J. Med. Research, 1919, v. 7, p. 160–166.

Sieger, W.: A comparison of the chemical and physiological properties of quinine and euquinine.—Pharm. Weekblad, 1919, v. 56, p. 783–785.

Halberkann, J.: The fate of quinine and hydroquinine in the body is discussed. It is shown that quinine may be taken up and retained by the erythrocytes.—Biochem. Ztschr. 1919, v. 95, p. 24–25.

Valdiguié, A., and Lacaze: A study of the elimination of quinine in the human organism.—Bull. sc. pharmacol. 1919, v. 26, p. 158–164, 206–215.

Johannessohn, Fritz: A study of the effect of quinine on the blood.—Ber. klin. Wchnschr. 1918, v. 55, p. 100–103, through Chem. Zentralbl. 1919, v. 1, p. 53.

O'Mally, John J., and Richey, DeWayne G.: A report on the skin reaction in quinine idiosyncrasy and methods of desensitization.—Arch. Int. Med. 1919, v. 24, p. 378–382.

Edlavitch, B. M.: The skin test for quinine idiosyncrasy is reported to have given accurate results in a case in which it was applied.—J. Am. M. Assoc. 1919, v. 73, p. 1933–1934.

Jamieson, T. H., and Lindsay, W. I.: Not even a temporary effect on the field of vision was observed after long-continued dosage with quinine.—J. Roy. Army Med. Corps, 1919, v. 32, p. 295–301.

Clerc, A., and Pezzi, C.: Data relative to the antagonistic action of adrenaline and quinine are given.—Compt. rend. acad. sc. 1919, v. 169, p. 1117–1118.

Dudgeon, L. S.: Attention is directed to the fact that necrosis of the tissues always follows the intramuscular or hypodermic injection of quinine, even though dissolved in oil. Intramuscular injections of quinine should, therefore, be given only when emergency renders this method of administration necessary.—J. Hyg. 1919, v. 18, p. 317–336.

Hehir, P.: A discussion of the action of quinine on malarial parasites and of the methods of administration of quinine.—Indian J. Med. Research. 1919, special No. Jan. p. 89–100.

Anon.: An alcoholic extract of helianthus is said to be used in Siberia as a substitute for quinine.—Oil, Paint & Drug Rep. 1919, v. 96, No. 21, p. 42.

Anon.: A note calling attention to the value of a decoction of the bark of the margosa tree as a substitute for quinine in malarial fever.—Chem. & Drug. 1919, v. 91, No. 22, p. 67.

QUININÆ HYDROCHLORIDUM.

Richard, F.: The assay of tablets containing quinine hydrochloride by means of the polariscope is described.—J. pharm. et chim. 1919, v. 19, p. 5–17.

QUININÆ SULPHAS.

van Gelder, Herman: On repeating his experiments with the de Vrij chromate test, the author found that 0.5 per cent of cinchonidine could be detected in 1 gram of quinine sulphate by dissolving in 40 cubic centimeters of boiling water, adding 6 cubic centimeters of 10 per cent potassium dichromate solution, filtering and adding to the filtrate three drops of 10 per cent sodium hydroxide solution. After the solution was heated for one hour on a water bath and allowed to stand 24 hours, a distinct precipitate was observed.—Pharm. Weekblad, 1919, v. 56, p. 1687–1688.

QUININÆ TANNAS.

Hommell, P. E.: Quinine tannate is of varying composition, about half of the alkaloid strength of the sulphate. It is seldom prescribed because of this variability.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

RENNINUM, N. F.

Anon.: Descriptions are given of the preparation, properties, and mode of action of animal and vegetable rennets.—Scientific Am. Supplement, May 3, 1919, through J. Am. Pharm. Assoc. 1919, v. 8, p. 558–561.

Suto, K.: Five lots of rennin examined assayed 1:15,625; 1:25,000; 1:25,000; 1:30,000; and 1:37,500, respectively. All were satisfactory except the first one.—Proc. Pennsylvania Pharm. Assoc., 1919, p. 90; J. Am. Pharm. Assoc. 1919, v. 8, p. 756.

RESINA.

Salvaterra, H.: Fractional extraction of the resin scraped from pine trees yielded two resins having distinctly different characters. The characteristics of each are stated.—Chem. Ztg., 1919, v. 43, p. 739, through J. Soc. Chem. Ind., 1919, v. 38, p. 953A–954A.

Knecht, E., and Hibbert, E.: A chemical study of certain constituents of American and French colophony, especially the pimaric acids.—J. Soc. Dyers, 1919, v. 35, p. 148, through J. pharm. et chim. 1919, v. 20, p. 324.

Paul, Ludwig: Colloidal nature of rosin and rosin soaps. The γ, β, and α pininic acids are stated to be identical with Tschirch's γ, α, and β abietic acids in the order mentioned.—Seifenfabr., 1919, v. 39, p. 121–124, 147–148, 175–176, 202–203.

Lange, A. R.: Data obtained on the products of successive distillations of rosin without access to air are tabulated.—Oil, Paint & Drug Rep. 1919, v. 95, No. 11, p. 28.

Grün, A., and Winkler, R.: Data are given relative to the products formed by the action of sulphuric acid on colophony.—Chem.

Umschau, 1919, v. 26, p. 77–79; J. Soc. Chem. Ind., 1919, v. 38, p. 589A.

Paul, L.: Data relative to the behavior of an alcoholic solution of lead acetate toward the resinous substances of colophony are given.—Kolloid-Ztschr. 1919, v. 24, p. 95–104, 129–138, 165–173; J. Soc. Chem. Ind. 1919, v. 38, p. 545A.

Paul, Ludwig: Oxidation is stated to play a very minor rôle in the transformations observed in colophony, the colloidally bound water being the controlling factor. The preparation, transformation, and tests for the various compounds thus formed are given.—Kolloid-Ztschr. 1919, v. 25, p. 241–246.

Crossley, T. L.: Results obtained in the determination of the melting point of rosin by the capillary method, and by the " column " method, using three different heights of a rosin column inside of a glass tube of small diameter with the bottom of the tube one inch below the surface of the water, are tabulated.—J. Ind. & Eng. Chem. 1919, v. 11, p. 52–53.

Fahrion, W.: A comparison of the physical and chemical constants of Austrian and American rosin. The literature on the subject is reviewed.—Chem. Umschau, 1919, v. 26, p. 65–67.

Grun, A., and Janko, J.: The iodine value of colophony determined by Wijs' method differs greatly from that obtained by the Hübl method, and in both cases varies widely according to the time of absorption and other conditions.—Chem. Umschau, 1919, v. 26, p. 20–22, 35–38; J. Soc. Chem. Ind. 1919, v. 38, p. 506A.

RESINA JALAPÆ.

Frerichs: If one drop of copper sulphate solution and 8 to 10 drops of bitter almond water are added to 0.5 gram of jalap resin dissolved in 10 cubic centimeters of alcohol, a blue color should not develop. This is a test for the presence of guaiac resin.—Jahres-Ber. 1917, p. 16, through Schweiz, Apoth.-Ztg. 1919, v. 57, p. 591.

RESINA SCAMMONIÆ.

Scoville, W. L.: A comparison of the physical and chemical properties of the resin obtained from the Mexican plant known as *Resina drastica* with the resins obtained from *Ipomoea orizabensis* and *Convolvulus scammonia*.—J. Ind. & Eng. Chem. 1919, v. 11, p. 335–336.

Éwe, G.: One lot of scammony resin assayed 85.0 per cent ether-soluble matter and 1.38 per cent ash, but was otherwise of U. S. P. quality. Another lot assayed 84.0 per cent ether-soluble, gave an unweighable ash, and was otherwise of U. S. P. quality. The U. S. P. requires not less than 95 per cent ether-soluble matter and not more than 1 per cent ash.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 90; J. Am. Pharm. Assoc. 1919, v. 8, p. 756.

RESORCINOL.

Goodman, N., and Grubman, B.: U. S. patent No. 1,314,138 describes the synthesis of resorcinol from benzene.—Chem. Abstr. 1919, v. 13, p. 2682.

Vermeulen, H.: The preparation and properties of a number of derivatives of resorcinol are described.—Rec. trav. chim. 1919, v. 38, p. 106–111.

RHEUM.

Arnold: A short account of the Chinese commerce in rhubarb states that the drug is exported principally from the Province of Szechwan in China, but that it is also grown in the Provinces of Chihi, Shensi, Kansu, Hupeh, and Tibet. The most expensive rhubarb comes from Shensi. A short description of the preparation of the drug for the market is also given.—Drug & Chem. Markets, 1919, v. 5, No. 21, p. 10.

Semmel, A.: From comparisons made of rhubarb cultivated in Russia with the commercial (Shensi) drug, it is concluded that the oxymethyl anthraquinones of both are the same, that the Russian drug contains more emodin than the Chinese, more oxymethyl anthraquinones and more anthra glucosides.—Pharm. Ztg. 1918, v. 63, p. 500, through Pharm. J. 1919, v. 102, p. 134.

Wimmer, C.: A microscopical method for the detection of Rhapontic rhubarb is described. The method depends upon the fact that Rhapontic powder will assume a blue color when treated successively with a 50 per cent aqueous solution of potash and 5 parts of 100 volume perhydrol.—Pharm. Ztg. 1919, v. 64, p. 348.

Anon.: A detailed description of a method for the quantitative determination of hydroxymethyl anthraquinone in senna, rhubarb, and cascara.—J. pharm. Belgique. 1919, v. 1, p. 200, through Pharm. J. Lond. 1919, v. 102, p. 250.

Anselmino, O.: Data relative to the ash content of rhubarb powder of different degrees of fineness obtained by various means are presented.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 117–120.

Ewing, C. O., and Viehoever, Arno: From an investigation it is concluded that the present limit of 13 per cent total ash for rhubarb should be raised to 22 per cent, and at the same time an acid-soluble ash standard of 1 per cent should be included.—J. Am. Pharm. Assoc. 1919, v. 8, p. 728.

RUBUS, N. F.

Éwe, G.: Three lots of blackberry bark examined contained 21, 30, and 25 per cent, respectively, of whole roots, whereas only the bark is desired.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 84; J. Am. Pharm. Assoc. 1919, v. 8, p. 670.

RUMEX, N. F.

Beal, George D., and Okey, Ruth E.: An approximate analysis of *Rumex crispus*, and a comparison of its hydroxymethyl anthraquinone with that from certain other drugs. The emodin of *Rumex crispus* was found to be identical with that from *Rhamnus purshiana*.—J. Am. Chem. Soc. 1919, v. 41, p. 693–706.

SACCHARUM.

Clacher, William: Beet sugar vs. cane sugar. Beet sugar is preferred by British jam makers because of its better keeping qualities.—Sugar, 1919, v. 21, p. 381–382, through Chem. Abstr. 1919, v. 13, p. 1945.

Anon.: The Institute of Industrial Research of Washington has issued a report showing that beet sugar may be used in the manufacture of medicines. Refined beet sugar is stated to be an excellent product, equalling in purity refined cane sugar.—Midl. Drug. 1919, v. 53, p. 20.

Anon.: A notice calls attention to a volume by G. M. Rolph entitled *Something about Sugar: Its History, Growth, Manufacture, and Distribution*.—Chem. Abstr. 1919, v. 13, p. 915.

van der Linden, T.: It is concluded from experiments that the solubility of sucrose is diminished in direct proportion to the invert sugar present, which is contradictory to Geerlig's conclusions.—Archief Suikerind. Nederl. Indië, 1919, v. 27, p. 591–598, through J. Soc. Chem. Ind. 1919, v. 38, p. 593A.

Colin, H., and Chaudun, A.: A report of researches on the diastatic inversion of sucrose. A study of the influence of the products of reaction on the speed of hydrolysis.—Compt. rend. acad. sc. 1919, v. 169, p. 849–852.

Lebert, M.: A study of the action of neutral salts on acid inversion of cane sugar.—Rev. Gen. Botanique, 1918, v. 30, p. 241–244, through Bot. Gaz. 1919, v. 67, p. 98–99.

Kopeloff, Nicholas, and Kopeloff, Lillian: It is demonstrated that mold spores contain enzymes which may be the cause of deterioration of sugar in some cases. An abstract.—Science, 1919, v. 49, p. 573.

Amons, W. J. Th.: From experiments, it is concluded that sugar deterioration may be caused by fungi as well as bacteria, depending on conditions.—Arch. Suikerind. 1917, v. 25, p. 1225–1231, through Chem. Abstr. 1919, v. 13, p. 1540.

Saladini, Raffaele: Cases of blennorrhagic urethritis are reported in which sugar injected into the urethra rapidly reduced the urethral secretion.—Arch. farmacol. sper. 1918, v. 25, p. 374–384.

SACCHARUM LACTIS.

Saillard, E.: Data showing the solubility of anhydrous lactose in water at temperatures varying from 21.5° to 65° C. are given.—Chim. et Ind. 1919, v. 2, p. 1035–1036, through J. Chem. Soc. Lond. 1919, v. 116, part 1, p. 575.

van der Haar, A. W.: A method for the identification of lactose is based on the nonformation of o-tolylhydrazone.—Rec. trav. chim. 1918, v. 37, p. 251–253.

Grossfeld, J.: The estimation of lactose in admixture with sucrose and invert sugar. Formulas are given for calculating the amount of lactose from the optical activity of the mixture.—Ztschr. Unters. Nahr.-u. Genussm. 1918, v. 35, p. 249–256, through Physiol. Abstr. 1919, v. 4, p. 404.

van Ketel, B. A.: The addition of crystalline lactose to drugs greatly facilitates pulverization in difficult cases.—Pharm. Weekblad, 1919, v. 56, p. 783–785.

SANGUINARIA.

Editorial: A description of sanguinaria, with notes on its therapeutic properties.—Eclectic M. J. 1919, v. 79, p. 215–216.

Ewe, G.: Seven samples of sanguinaria examined came up to the standards set by the U. S. P.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 93.

SANTONINUM.

Davenport, C. J.: The auditor finds that *Quisqualis indica* is a satisfactory substitute for the more expensive santonin.—China Med. J. 1918, v. 32, p. 133, through Chem. Abstr. 1918, v. 12, p. 2404.

SAPO.

Kyser, E. V.: It is recommended that olive oil soap of the U. S. P. be replaced by a milled soap consisting of 80 per cent tallow and 20 per cent coconut oil with sodium hydroxide as the saponifying agent. Tests to which a soap of this nature should conform are described.—J. Am. Pharm. Assoc. 1919, v. 8, p. 813–814.

Campbell, Archibald: Tentative standard methods are given for the sampling and analysis of commercial soaps and soap products.—J. Ind. & Eng. Chem. 1919, v. 11, p. 785–788.

Goldschmidt, F.: An article discussing the examination of raw materials for the manufacture of soaps according to the syndicate method.—Am. Perf. 1919, v. 13, p. 408–409.

Utz: A description of a modification of the Mai and Rheinbarger method for determining water in soap and soap powder.—Seifenfabr. 1919, v. 39, p. 225–227, through Chem. Abstr. 1919, v. 13, p. 2770.

Bosshard, E., and Comte, F.: The exact determination of the fatty acid content of soaps by means of the "saponieter" of Huggenberg and Stadlinger is described.—Helvetica chim. Acta, 1918, v. 1, p. 251–270.

Schuttig, Chas. L.: A description of a method for the determination of free alkali in soaps. After salting out the soap, the filtrate is titrated against N/10 hydrochloric acid, using phenolphthalein as indicator.—Chem. Analyst, 1919, No. 29, p. 23–24.

Fortini, V.: A description of a rapid method for the determination of resins in soaps. The method is based on the insolubility of nitrated resin in petroleum ether.—Seifensieder-Ztg. 1919, v. 46, p. 7, through Chem. Umschau, 1919, v. 26, p. 27.

Salm, Edward, and Prager, Siegfried: A description of a direct analytical method for the determination of calcium soaps with solvents.—Am. Perf. 1919, v. 13, p. 374–375, 377.

Fischer, Martin H.: Colloid chemical studies of soaps. I. Data are given relative to the hydration capacity of some pure soaps.—Chem. Eng. 1919, v. 27, p. 155–162.

Roberts, J. G.: One lot of Castile soap was rejected because its iodine value was only 68.7, whereas the U. S. P. requires not less than 84 nor more than 90. Two other samples had iodine values of 81 and 82.5, respectively. Samples of Castile coap of a well-established and reliable brand obtained at various times, have been found to have the following iodine values: 81.79, 82.28, and 79.36. These results indicate that the U. S. P. limit is too high, particularly in view of the fact that the minimum limit for olive oil from which it is made is only 79.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 90–91; J. Am. Pharm. Assoc. 1919, v. 8, p. 756.

SAPO MOLLIS.

Mayer, Joseph L.: It is concluded that the present formula for the preparation of soft soap is less satisfactory than the one formerly official. The soap made from linseed oil is not only more detergent than that made from cottonseed oil, but the entire product is better.—Proc. New York Pharm. Assoc. 1919, p. 57.

Kyser, E. V.: Soft soap which will meet every requirement of the U. S. P. can be successfully made from the oils of cottonseed, corn, soya bean, peanut, and various other vegetable oils, and with the substitution of soda for potash. The method for analysis given in the U. S. P. is stated to be inadequate and it is proposed that the same methods employed for the analysis of Sapo, as given in the author's paper, be adopted for soft soap with the necessary changes as to moisture, titer, iodine value, acid value, etc.—J. Am. Pharm. Assoc. 1919, v. 8, p. 815.

Mueller, Bertha: A modification of the U. S. P. process for the preparation of soft soap is described. By this process, saponification is effected without the employment of heat.—Am. J. Pharm. 1919, v. 91, p. 280–281.

Lampa, Robert R.: It is recommended that linseed oil soap be again made official on the grounds that it produces a more satisfactory tincture, possesses a more pleasant odor, and is preferred by dermatologists generally.— Proc. New York Pharm. Assoc. 1919, p. 54.

Stemple, L.: A discussion of the disadvantages of using heat in the preparation of soft soap, with a description of a cold process for its preparation.—Merck's Rep. 1919, v. 28, p. 17.

Éwe, G.: Practically all of many lots of soft soap examined were neutral or possessed a negligible acidity, whereas the U. S. P. requires an alkalinity equivalent to not less than 0.1 per cent potassium hydroxide.—J. Am. Pharm. Assoc. 1919, v. 8, p. 756.

SARSAPARILLA.

Anon.: There is a scarcity of jalap and sarsaparilla root owing to the revolutionary conditions in parts of Mexico, laborers being unable to work in the interior. Most of the jalap and sarsaparilla root comes from Cordova and Jalapa in the State of Vera Cruz, where the rebels are in complete control of the surrounding country.—Drug & Chem. Markets, 1919, v. 5, No. 67, p. 26.

Anon.: The Bureau of Chemistry reports that a sample of sarsaparilla root examined yielded 25.39 per cent of ash, whereas the Pharmacopœia provides that it shall not yield more than 10 per cent of ash.—S. R. A. Chem. Suppl. 1919, No. 61, p. 20.

Éwe, G.: Two lots of sarsaparilla examined contained excessive stem structure adhering to the roots.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 90.

SASSAFRAS.

Ewing, C. O., and Viehoever, Arno: Investigations conducted by the Bureau of Chemistry, as well as analyses reported in the literature, show that it is entirely practicable to obtain commercial sassafras which yields less than 10 per cent of total ash and 5 per cent of acid-insoluble ash. The present U. S. P. standard of 30 per cent is characterized as being absurd.—J. Am. Pharm. Assoc. 1919, v. 8, p. 729.

Cohn, P.: Two lots of sassafras bark examined contained 20 per cent and 22 per cent, respectively, of whole roots. The greater part of a third lot was not deprived of the periderm, as required by the U. S. P.—J. Am. Pharm. Assoc. 1919, v. 8, p. 756.

Hommell, P. E.: The U. S. P. should give directions for the proper storage of sassafras.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

SCAMMONIÆ RADIX.

Alsberg, Carl L., et al.: True scammony, *Convolvulus scammonia* L., appears to be no longer available in commercial quantities, and it seems probable that the product now listed as scammony in the trade journals is really orizaba tubers, *Ipomœa orizabensis* Ledanois, sometimes improperly called "Mexican scammony." This product contains an active purgative resin in larger amounts than true scammony.—J. Am. Pharm. Assoc. 1919, v. 8, p. 468.

SCILLA.

Buschmann, E.: In a chemical investigation of the constituents of squills, the following substances were isolated: choline, xanthoscillid, scillisterol, phytosterol, a brown oil containing formic, palmitic, and probably acetic or propionic and oleic acids, a phytosterol glucoside, and a brown dye.—Arch. Pharm. 1919, v. 257, p. 79–86.

SCOPARIUS, N. F.

Hugo: A note calls attention to the use of scoparius in olden times for the treatment of rabies. This subject is stated to be worthy of further attention on the part of research workers.—Chem. & Drug. 1919, v. 91, No. 17, p. 80.

SCOPOLAMINÆ HYDROBROMIDUM.

King, Harold: A report of researches on the resolution of scopolamine and on its components, tropic acid and oscine. Studies on the stereochemistry of scopolamine are also reported.—J. Chem. Soc. Lond. 1919, v. 115, p. 476–508, 974–982.

Macht, David I.: The l-form of scopolamine is found by experiments to be more stimulating to the isolated urethra than the d-form.—J. Pharmacol. & Exper. Therap. 1918, v. 12, p. 255–263.

SCUTELLARIA, N. F.

Éwe, G.: One lot of skullcap examined consisted mostly of *Trichostema dichotomum*, a small proportion of *Scutellaria canescens*, a species related to the official drug, and only a trace of skullcap.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 90; J. Am. Pharm. Assoc. 1919, v. 8, p. 756.

Bargellini, G.: A contribution to our knowledge of the constitution of scutellarein.—Gaz. chim. ital. 1919, v. 49, part 2, p. 47–63.

SENNA.

Anon.: A detailed description of a method for the quantitative determination of hydroxymethyl anthraquinone in senna, rhubarb, and cascara.—J. pharm. Belgique, 1919, v. 1, p. 200; Pharm. J. Lond. 1919, v. 102, p. 250.

Alsberg, Carl L., et al.: *Tephrosia appolinea* was observed as an adulterant in several importations of senna leaves. As a number of *Tephrosia* species have been reported to contain a toxic glucoside, senna containing this adulterant was denied admission.—J. Am. Pharm. Assoc. 1919, v. 8, p. 465.

Anon.: Since the beginning of 1917 large quantities of so-called Palthé senna leaves have been imported into Germany from Switzerland. They have been identified as the leaves of *Cassia auriculata* L. They contain no oxymethyl anthraquinones and possess no laxative action.—Pharm. Ztg. 1919, v. 64, p. 242.

Anon.: The use of Folia Alypi as a substitute for senna leaves is proposed.—Pharm. Post. 1918, v. 51, p. 527, through Pharm. Zentralh. 1919, v. 51, p. 63.

Anselmino, O., and Rost, E.: A study of the constituents of so-called Palthé senna leaves. The presence of oxymethyl anthraquinone could not be established.—Arbb. Kais. Gesundh. Amt. v. 51, p. 392–396, through Chem. Zentralbl. 1919, v. 4, p. 238.

Bohrisch, P.: Descriptions of microscopical and chemical methods for distinguishing Folia sennæ palthé from the official senna.—Pharm. Zentralh. 1919, v. 60, p. 268–270, 281–284.

SERUM ANTIDIPHTHERICUM.

Kraus, R., and Sordelli, A.: Experimental evidence is given indicating that old horses seem to be better producers of serum than young ones. By injecting neutral mixtures of toxin-antitoxin twice a week in increasing doses an antidiphtheritic serum of high power may be produced in 20 days.—Rev. Inst. Bact. Argentina, 1918, v. 1, p. 195–203, 427–444, through Exper. Sta. Record, 1919, v. 40, p. 580.

Nicolle, M., et al.: An account of the application of the principle of mutual precipitation of toxins and antitoxins to the titration of antidiphtheritic and antitetanic serums.—Compt. rend. acad. sc. 1919, v. 169, p. 1433–1434.

Seligmann, Erich: A review of the literature on the nature of natural and acquired immunity to diphtheria in man.—Ztschr. Hyg. 1918, v. 87, p. 243–268.

Park, W. H.: Experimental and clinical data are given relative to the persistence of immunity following injections of toxin-antitoxin mixtures.—Proc. Soc. Exper. Biol. & Med. 1918, v. 15, p. 100–101.

Ramond, L.: A report of serum sickness in diphtheria. After three injections of antitoxin in five days the patient was apparently convalescing when the fever returned, with extreme prostration, an eruption and polyarthritis. Rapid recovery followed.—Progrès

Médical, Paris, 1919, v. 34, p. 387, through J. Am. M. Assoc. 1919, v. 73, p. 1731.

McCallum, A. D.: A report of a case of fatal anaphylaxis following prophylactic injection of diphtheria antitoxin subcutaneously.—Brit. M. J. 1919, v. 2, p. 596–597.

SERUM ANTITETANICUM.

Tizzoni, G., and Perruci, P.: Tetanus antitoxin, to which antiseptics such as phenol have been added, lose their potency to a large extent, so that after a year their therapeutic efficiency is much lower. This loss in potency is thought to be due to a chemical or physical alteration in the antitoxin brought about by the antiseptic material added.—Giorn. di. med. mil. 1918, April 30, through Abstr. Bact. 1919, v. 3, p. 67.

Londini, A.: The property of antitetanus serum to annul the toxic action of strychnine has proved useful in standardizing the serum.—Policlinico, Rome, 1918, v. 25, p. 351, through J. Am. M. Assoc. 1919, v. 72, p. 231.

SINAPIS ALBA.

Houston, D. F.: The following is the standard for white mustard seed recognized by the U. S. Department of Agriculture: "White mustard seed is the seed of *Sinapis alba* L. *Sinapis alba* contains no appreciable amount of volatile oil. It yields not more than 5 per cent of total ash nor more than 1.5 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 13–14.

Ewing, C. O., and Viehoever, Arno: In the examination of more than 200 specimens of mustards of different species and varieties, a total ash content of over 5 per cent or over 1 per cent of acid-insoluble ash was rarely observed. A standard of 6 per cent for total ash and 1.5 per cent for acid-insoluble ash would, therefore, appear to be quite satisfactory.—J. Am. Pharm. Assoc. 1919, v. 8, p. 728.

SINAPIS NIGRA.

Houston, D. F.: The following is the standard for black mustard recognized by the U. S. Department of Agriculture: "Black mustard, *Brassica juncea* Hook f. et Th., or varieties or closely related species of the types of *Brassica nigra* and *Brassica juncea*. *Brassica nigra* (black mustard) and *Brassica juncea* yield 0.6 per cent of volatile mustard oil (calculated as allylisothiocyanate and determined by the method given in Service and Regulatory Announcements, Chemistry 20). The varieties and species closely related to the types of *Brassica nigra* and *Brassica juncea* yield not less than 0.6 per cent of volatile mustard oil, similar in character and composition to the volatile oils yielded by *Brassica nigra* and *Brassica juncea*. These mustard seeds contain not more than 5 per cent of total ash nor more than 1.5 per cent of ash insoluble in hydrochloric acid."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 13, 14.

Alsberg, Carl L., et al.: Owing to the cutting off of supplies from Europe, the importation of oriental and Indian species of mustard has been greatly stimulated. Some of these species are considered of value while others are not. Of the former, Chinese mustard, *Brassica juncea* L., and Japanese mustard, *Brassica cernua* Thunberg, may be mentioned. The latter class is represented by Chinese colza, *Brassica campestris* var., *sativa annua chinensis* Lund and Kiaerskou, *Brassica chinensis* L., Indian tori, *Brassica napus* var. *dichtoma*.—J. Am. Pharm. Assoc. 1919, v. 8, p. 469.

Rothéa: Analytical data relative to the constituents of wild mustard, *Sinapis arvensis* (also known as *Brassica sinapis*) are given.—Bull. sc. Pharmacol. 1919, v. 26, p. 16–20.

SODII ARSENAS.

Ewe, George E.: A comparison of the toxicity of disodium methyl arsenate with sodium arsenate shows that the latter is about ten times as toxic as the former.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 172.

SODII BENZOAS.

Anon.: Analytical data obtained in the testing of commercial samples of sodium benzoate are given. A modification of Squire's method is recommended for the assay of the salt.—Evans' An. Notes. 1919, p. 88–89.

Roberts, J. G.: One lot of sodium benzoate examined was not of U. S. P. quality, as it was only 96.1 per cent pure.—J. Am. Pharm. Assoc. 1919, v. 8, p. 757.

SODII BENZOSULPHINIDUM.

Wiedemann, H. E.: Two of five samples of soluble saccharin examined were found to contain 47.56 and 45.24 per cent of sucrose, respectively.—Bull. Missouri F. & D. Com. 1918, p. 16.

SODII BICARBONAS.

Bachman, Gustave: The volatile matter in seven samples of sodium bicarbonate examined ranged from 21 to 40.5 per cent. The U. S. P. allows as much as 36.5 per cent. The samples assayed 94.4, 98.6, 99, 100, 100.5, 101.1, and 102.6 per cent of bicarbonate, respectively.—Proc. Minnesota Pharm. Assoc. 1919, p. 133.

Harrop, George A., Jr.: A report of a case of tetany following the intravenous infusion of sodium bicarbonate. Attention is called to the danger attendant upon the intravenous use of sodium bicarbonate in conditions in which the renal excretory function is markedly impaired.—J. H. Hosp. Bull. 1919, v. 30, p. 62–63.

SODII BORAS.

Wrinkle, N., and Kuhnert, W. A.: U. S. patent No. 1,316,755. Borax is separated from potassium chloride by converting it into the soluble metaborate by means of a solution of sodium hydroxide and then reconverting the metaborate into the biborate by treating the solution with carbon dioxide.—Chem. Abstr. 1919, v. 13, p. 2980.

Anon.: Attention is directed to the necessity of watching borax for excessive amounts of lead and arsenic.—Evans' An. Notes, 1919, p. 29–30.

SODII BROMIDUM.

Zimmermann, Walther: A sample of sodium bromide examined was found to contain 0.053 per cent of carbonate.—Apoth.-Ztg. 1919, v. 34, p. 14.

SODII CACODYLAS.

Rupp, E.: A description of a simple method for the quantitative assay of sodium cacodylate is given. Arch. Pharm. 1918, v. 256, p. 194.

Anon.: A method for the determination of arsenic in sodium cacodylate is described.—Pharm. Zentralh. 1919, v. 60, p. 194.

Bertrand, R.: A note on the incompatibility of sodium cacodylate with strychnine sulphate. A method for preparing solutions containing a combination of these salts is described.—Bull. sc. pharmacol. 1919, v. 26, p. 407–410.

Fleury, P., and Hourvitz, M.: A discussion of the cause and remedy for the incompatibility of strychnine sulphate with sodium cacodylate and sodium glycerophosphate.—J. pharm. et chim. 1919, v. 20, p. 369–374.

Caron, A. R.: Arsenic in the form of sodium cacodylate is a valuable remedy in tuberculosis and anemia.—New York M. J. 1919, v. 110, p. 513–514.

Peyre, J. L.: A note calls attention to favorable results obtained in the intravenous administration of sodium cacodylate in recurrent fever.—Presse Médicale, 1919, v. 27, p. 615.

SODII CARBONAS MONOHYDRATUS.

Philibert, M.: The only exact procedure for determining CO_2 in sodium carbonate is the "classic" method with $BaCl_2$, although the method of Mestrezat, with phenolphthalein and litmus, gives approximate results.—J. pharm. et chim. 1918, v. 18, p. 260–272.

Stewart, G. N., and Rogoff, J. M.: Action of drugs upon the output of epinephrine by the adrenals. II. The intravascular injection of a small volume of concentrated sodium carbonate solution causes a temporary increase in the rate of liberation of epinephrine by the adrenals.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 167–182.

SODII CHLORIDUM.

Hommell, P. E.: The U. S. P. emetic dose of sodium chloride is 4 drachms. Two drachms are recommended by pharmacologists as sufficient.—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

Hughes, William: A study of the reaction between sodium chloride solution and metallic magnesium.—J. Chem. Soc. Lond. 1919, v. 115, p. 272–277.

Delepine, M.: The statement of Léger concerning the incompatibility of mercuric benzoate with sodium chloride, resulting in the formation of mercuric chloride and sodium benzoate, is confirmed.—Répert. Pharm. 1919, v. 30, p. 184.

Funk, E.: A sample of sodium chloride examined was found to contain as impurities iron, calcium compounds, and 2 per cent of ammonia.—Zentralbl. f. Pharm. 1919, v. 15, p. 91, through Pharm. Zentralh. 1919, v. 60, p. 565.

SODII CITRAS.

Anon.: Of 100 samples of sodium citrate examined only 50 were practically neutral. As much as 1½ per cent of an excess of either citric acid or sodium carbonate were noted.—Evans' An. Notes, 1919, p. 89–90.

SODII IODIDUM.

Holmberg, Bror.: Electrolytic dissociation of sodium iodide. The law of mass action is found to be strictly applicable to the ionic dissociation of sodium iodide at concentrations of N/1 to N/20.—Svensk Kem. Tidskr. 1918, v. 30, p. 6.

De Forcrand, R., and Taboury, F.: Sodium iodide, when treated with SO_2 under the proper conditions reacts to form a sulphone of the composition $NaI.3SO_2$.—Compt. rend. acad. sc. 1919, v. 168, p. 1253–1257.

Howard, Robert C.: In obstinate cases of syphilis, 10 to 335 grains of sodium iodide in 5 to 10 per cent solution has been injected intravenously without harmful results.—Am. J. Syphilis, 1918, v. 2, p. 550–562.

SODII NITRIS.

Grayson, J.: British patent No. 127,183 describes the manufacture of sodium nitrite by reducing nitric acid with sulphur dioxide and absorbing the gas in soda solution.—Chem. Abstr. 1919, v. 13, p. 2424.

Dienert, F.: A method for the determination of nitrites based on the reaction pointed out by Kalmann is described.—Ann. chim. analyt. 1919, v. 24, p. 4.

SODII PHOSPHAS.

Joannis, A.: Some properties of acid phosphates. Disodium hydrogen phosphate does not absorb dry ammonia gas and only takes up an insignificant amount of liquid ammonia.—Compt. rend. acad. sc. 1919, v. 168, p. 1202–1203.

Greenwald, Isidor: As a result of the intravenous injection of sodium phosphate experimentally it is concluded that there is no evidence of a direct toxic action of the phosphate ion.—J. Pharmacol. & Exper. Therap. 1918, v. 11, p. 281–301.

Editorial: A discussion of the use of sodium phosphate as a laxative and cathartic.—Eclectic M. J. 1919, v. 79, p. 453–454.

SODII SALICYLAS.

Plenderleith, J. W.: A note on the solubility of sodium salicylate. Under certain conditions crystals of sodium salicylate may be deposited from a 1 in 2 or even a 1 in 3 aqueous solution.—Chem. & Drug. 1919, v. 91, No. 16, p. 65; Pharm. J. Lond. 1919, v. 102, p. 236–237.

Harrison, J. B. P., and Carter, F. E.: The Ph. Brit. method for the quantitative estimation of sodium salicylate is stated to give low results. A method devised by the authors is described in detail.—Pharm. J. Lond. 1919, v. 103, p. 230–231.

Hanzlik, P. J., and Wetzel, N. C.: The salicylates. XI. An investigation of the stability and destruction of the salicyl group under biological conditions. The deterioration of sodium salicylate solutions on standing due to microorganisms can be prevented by the addition of chloroform.—J. Pharmacol. & Exper. Therap. 1919, v. 14, p. 25–42.

Holt, Thomas: Of five samples of sodium salicylate examined, one was adulterated.—Rep. Connecticut D. & F. Com. 1919, p. 21.

SODII SULPHAS.

Goldschmidt, Samuel, and Dayton, A. B.: A study of the behavior of sodium and magnesium sulphate solutions in the intestines. Concentrated solutions of these salts placed in the colon are diluted by the passage of fluid from the blood into the intestine until the osmotic pressure closely approximates that of the blood.—Am. J. Physiol. 1919, v. 48, p. 450–458.

Roberts, J. G.: A sample of sodium sulphate examined was slightly acid to litmus instead of neutral, as required by the U. S. P.—J. Am. Pharm. Assoc. 1919, v. 8, p. 757.

SODII SULPHIS EXSICCATUS.

Kolthoff, I. M.: The best results are obtained in the iodometric determination of sulphurous acid and its salts if the solution to be titrated is run into an excess of iodine solution and the excess of the latter then determined.—Pharm. Weekblad, 1919, v. 56, p. 1366–1373.

SODII THIOSULPHAS.

Jellinek, K., and Jellinek, E.: A study of the electrolytic formation of sodium thiosulphate and its chemical decomposition.—Ztschr. physik. Chem. 1919, v. 93, p. 325–367; see also Chem. Abstr. 1919, v. 13, p. 2476.

Bolland, A.: Sodium thiosulphate gives crystalline precipitates, which are well defined when examined microscopically, with thallous nitrate, barium chloride, lead acetate, and benzidine.—Compt. rend. acad. sc. 1919, v. 169, p. 651–654.

Labat, A.: A criticism of the method of the Ph. Fr. of testing for the presence of sulphate in sodium thiosulphate. An improved method is described.—Bull. soc. pharm. Bordeaux, 1919, v. 57, p. 156–157.

Diénert, F., and Wandenbulcke, F.: A study of the action of sodium thiosulphate on hydrochlorides has revealed the fact that both sulphate and tetrathionate are formed.—Compt. rend. acad. sc. 1919, v. 169, p. 29–30.

Kolthoff, I. M.: Iodometric studies. VI. A study of the reaction of thiosulphate with iodine. IX. An investigation of the stability of thiosulphate solutions.—Pharm. Weekblad, 1919, v. 56, p. 572–585, 878–888.

Teichmann, E., and Nagel, W.: The observation of Long that sodium thiosulphate protects animals against the toxic effects of hydrocyanic acid is confirmed.—Biochem. Ztschr. 1917, v. 93, p. 312–323.

SPARTEINÆ SULPHAS.

Valeur, A., and Luce, E.: A study of the action of hydrogen dioxide upon sparteine and isoparteine.—Compt. rend. acad. sc. 1919, v. 168, p. 1276–1278.

Valeur, A.: An anomaly in the solubility of sparteine sulphate. A rise in temperature causes a decrease in solubility which is attributed to the abnormal solubility of the basic sulphate formed.—Bull sc. pharmacol. 1919, v. 26, p. 145–151.

Anon.: Some of the samples of sparteine sulphate examined contained only 15 to 20.6 per cent water of crystallization. The theoretical amount is 21.3 per cent. The melting points ranged from 136° to 150°.—Evans' An. Notes, 1919, p. 92.

SPECIES PECTORALES, N. F.

Anon.: The reason for including pectoral species in the N. F. is said to be the decided tendency manifested among physicians to employ this or a similar preparation in the treatment of coughs, colds, and similar ailments in babies and infants, where a nonalcoholic remedy. free from chemicals or harsh-acting drugs is desirable.—N. A. R. D. J. 1919, v. 27, p. 505.

SPIGELIA.

Roberts, J. G.: Of four samples of spigelia examined, one was practically all ruellia, another contained about 21 per cent stems and other foreign matter and about 29 per cent dirt, showing that it contained about 50 per cent of true spigelia. One lot contained about 5 per cent excess of stems, while another was practically of U. S. P. grade, as it had only 1 per cent excess of stems.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 91; J. Am. Pharm. Assoc. 1919, v. 8, p. 757.

Éwe, G.: One lot of spigelia examined contained excessive soil and stones.—J. Am. Pharm. Assoc. 1919, v. 8, p. 757.

SPIRITUS.

van Urk, H. W.: A description of a simple distilling apparatus suitable for preparing aromatic waters and spirits and for sterilizing.—Pharm. Weekblad, 1919, v. 56, p. 1301–1303.

Nag, Nagendra C., and Lal, Panna: A description of a simple and rapid method for the estimation of alcohol in spirituous liquors. An abstract.—Am. J. Pharm. 1919, v. 91, p. 115–117.

R. P.: Methods for the detection of denaturants in spirits, such as brandy, are described.—Pharm. Ztg. 1919, v. 64, p. 278–279.

SPIRITUS ÆTHERIS COMPOSITUS, N. F.

Hommell, P. E.: Compound spirit of ether should not have been added to the galenicals of the N. F., as the U. S. P. spirit of ether is the one preferred by the medical profession. The presence of the variable etherial oil in the compound spirit is a drawback, contributing a disagreeable taste and not infrequently nausea, while its therapeutic value is very doubtful.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SPIRITUS ÆTHERIS NITROSI.

Hommell, P. E.: The working formula for the preparation of spirit of nitrous ether should be deleted from the U. S. P., as but few pharmacists attempt to manufacture this article. The process is rather difficult, tedious, and the product obtained is usually unsatisfactory.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

Mayer, Joseph L.: A volumetric method, such as that of Dietz, should be given for spirit of nitrous ether, as very few pharmacists own a nitrometer.—Proc. New York Pharm. Assoc. 1919, p. 58–59.

McGill, A.: A report of the examination of 184 samples of sweet spirits of nitre. The effect of alcoholic strength on its keeping quality is noted. Some of the samples showed satisfactory alcoholic content, but were low in ethyl nitrite. Twenty-two contained 1 to 1.52 per cent ethyl nitrite and 24 contained less than 1 per cent.—Bull. Lab. Dept. Health, Ottawa, Canada, 1919, No. 431.

Jongwald, Mattys: Of 29 samples of spirit of nitrous ether examined, 2 were up to standard. The ethyl nitrite content ranged from 0.47 to 4.64 per cent. The U. S. P. requires not less than 3.5 per cent nor more than 5.5 per cent of ethyl nitrite.—Proc. North Dakota Pharm. Assoc. 1919, p. 59.

Woods, Chas. D.: Of 47 samples of spirit of nitrous ether examined, 31 were deficient in ethyl nitrite.—Off. Insp. No. 91, Maine Agric. Exper. Sta. 1919, p. 3–6.

Anon.: Of 16 samples of sweet spirit of nitre examined, 12 were rejected.—Bull. Vermont Bd. Health, 1919, v. 19, No. 3 and No. 4; v. 20, No. 1.

SPIRITUS AMMONIÆ AROMATICUS.

Abel Scholar: The Ph. Brit. does not make mention of the state of comminution of the ammonium carbonate to be used in the preparation of the aromatic spirit of ammonia. It is desirable to have it in as fine a state of subdivision as possible in order to expedite solution.—Chem. & Drug. 1919, v. 91, No. 33, p. 71.

Hill, Rutherford: A note calls attention to the formation of acicular crystals in the aromatic spirit of ammonia, Ph. Brit., when prepared without distillation and omitting the oils of lemon and nutmeg.—Chem. & Drug. 1919, v. 91, No. 16, p. 65; also Pharm. J. Lond. 1919, v. 102, p. 237.

Mayer, Joseph L.: The analysis of aromatic spirit of ammonia for total ammonia, ammonium carbonate, and ammonia can be completed so easily and so rapidly that a procedure for this purpose should be included in the Pharmacopœia.—Proc. New York Pharm. Assoc. 1919, p. 59.

Hommell, P. E.: A standard method of assaying aromatic spirit of ammonia should be given in the U. S. P.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

Jongwald, Mattys: The specific gravity of 78 samples of aromatic spirit of ammonia varied from 0.886 to 0.937 at 25° C. The alkalinity calculated as ammonia ranged from 0.2128 gm. to 2.6226 gm. for 100 cubic centimeters.—Proc. North Dakota Pharm. Assoc. 1919, p. 58.

Bachman, Gustave: Of four samples of aromatic spirit of ammonia analyzed for free ammonia, ammonium carbonate, and for alcohol content, one was deficient in ammonium carbonate and low in percentage strength of alcohol.—Proc. Minnesota Pharm. Assoc. 1919, p. 136.

Hommell, P. E.: The U. S. P. should direct that aromatic spirit of ammonia be kept in amber-colored containers.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

SPIRITUS AMYGDALÆ AMARÆ.

Anon.: A report of a fatal case of poisoning, due to drinking essence of bitter almonds.—Pharm. J. Lond. 1919, v. 103, p. 471.

SPIRITUS ANISI.

Anon.: Of nine samples of spirit of anise examined, one was rejected because it did not conform to the U. S. P. requirements.—Bull. Vermont Bd. Health, 1919, v. 19, Nos. 3 and 4, v. 20, No. 1.

SPIRITUS CAMPHORÆ.

Utz: The quantities of camphor and alcohol in a sample of spirits of camphor may be found by determining the specific gravity and refractive index and referring these to a graph constructed from results obtained with solutions of known composition.—Pharm. Zentralh. 1919, v. 60, p. 373–378; J. Soc. Chem. Ind. 1919, v. 38, p. 923A.

Lautenschlaeger, L.: Titrimetric determination of aldehydes and ketones. The quantitative determination of camphor in spirit of camphor by means of hydrazine is described.—Arch. Pharm. 1918, v. 259, p. 81–89.

Table showing some of the analytical results reported for spirit of camphor.

Reporters.	Number of samples—		References.
	Examined.	Rejected.	
Bailey, E. M	17	10	Bull. Connecticut Agric. Exper. Sta. 1919, No. 219, p. 244.
Keeny, J. R	13	11	Bull. Louisiana Bd. Health, 1919, No. 2, p. 88–89.
Woods, Chas. D	67	18	Off. Insp. 91, Maine Agric. Exper. Sta. 1919, p. 6–9.
Jongwald, Mattys	22	15	Proc. North Dakota Pharm. Assoc. 1919, p. 57.
Anon	16	2	Bull. Vermont Bd. Health, 1919, v. 19, No. 3 & 4; v. 20, No. 1.

SPIRITUS CINNAMOMI.

Hommell, P. E.: As a flavor, spirit of cinnamon is of some consequence, but for medicinal purposes it is seldom used. Its deletion from the U. S. P. would be justifiable.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SPIRITUS JUNIPERI.

Hommell, P. E.: Spirit of juniper should be deleted from the U. S. P., as the compound spirit is more agreeable and effective.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SPIRITUS LAVANDULÆ.

Hommell, P. E.: Spirit of lavender is so seldom prescribed for its therapeutic effect that it might as well be deleted from the U. S. P.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SPIRITUS MENTHÆ PIPERITÆ.

Kelly, E. F.: Due to the failure of the U. S. P. to direct that the finished product be made up to 1,000 cubic centimeters by the addition of sufficient alcohol, the spirit of peppermint contains approximately 10.6 per cent of oil of peppermint instead of 10 per cent as commonly understood.—J. Am. Pharm. Assoc. 1919, v. 8, p. 115–116.

Scofield, Walter W.: Of 15 samples of spirit of peppermint examined, 1 did not conform to the U. S. P. requirements.—Rep. New Jersey Dept. Health, 1919, p. 85–87.

Anon.: Of 12 samples of essence of peppermint examined, 2 were not of U. S. P. quality.—Bull. Vermont Bd. Health, 1919, v. 19, Nos. 3 and 4; v. 20, No. 1.

SPIRITUS MENTHÆ VIRIDIS.

Hommell, P. E.: There is no good reason for retaining spirit of spearmint in the U. S. P., as spirit of peppermint is the more agreeable, effective, and popular of the two.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SPIRITUS MYRCIÆ COMPOSITUS, N. F.

Anon.: At a hearing before the officials of the Bureau of Internal Revenue charged with enforcing the prohibition law, it was recommended that tartar emetic be added to bay rum to make it unfit for use as a beverage.—Drug & Chem. Markets, 1919, v. 5, No. 65, p. 10.

Scofield, Walter W.: Of 40 samples of compound spirit of myrcia examined, only 4 did not conform to N. F. standards.—Rep. New Jersey Dept. Health, 1919, p. 85–87.

STILLINGIA.

Éwe, G.: One lot of stillingia root examined was wormy and mouldy to the extent of 70 to 80 per cent.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 91; J. Am. Pharm. Assoc. 1919, v. 8, p. 757.

STRAMONIUM.

DeGraaff, W. C.: Notes on the cultivation of stramonium in Holland.—Pharm. Weekblad, 1919, v. 56, p. 1106–1107.

Koch, George P.: Data showing the influence of the presence of stems and roots on the total alkaloid content of the leaves of stramonium. It is concluded that the whole plant, either with or without the root, can be harvested and used for the commercial preparation without fear of the total alkaloid content falling below 0.25 per cent.—Am. J. Pharm. 1919, v. 91, p. 11–16.

Rustung: Norwegian stramonium leaves were found to contain 0.18 per cent of alkaloids and 9.7 per cent of water. Landahl found *Datura stramonium* L. var. *inermis* to yield 0.29 per cent of alkaloids in 1916 and 0.39 per cent in 1917.—Norges Apoth. Tidskr. 1918, p. 381, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 339.

Alsberg, Carl L., et al.: In a number of instances importations of "stramonium leaves" have been found to consist of the leaves of coclebur, *Xanthium strumarium* L.—J. Am. Pharm. Assoc. 1919, v. 8, p. 471.

Anon.: A sample labelled "Spanish stramonium leaves" was found to consist of the leaves of *Xanthium macrocarpum* D. C.—Evans' An. Notes, 1919, p. 93–95.

Roberts, J. G.: Three lots of stramonium leaves examined assayed 0.36, 0.33, and 0.43 per cent, respectively, of mydriatic alkaloids, which amounts are well above the U. S. P. limit of not less than 0.25 per cent.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 91; J. Am. Pharm. Assoc. 1919, v. 8, p. 757.

Hommell, P. E.: The U. S. P. should direct that stramonium leaves be preserved in tightly closed containers protected from the light.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

STROPHANTHINUM.

Levy, Robert L., and Cullen, Glenn E.: A study of the deterioration of crystalline strophanthin in aqueous solution. Decomposition of the strophanthin is stated to be due to the alkalinity imparted to the solution by the glass container. To avoid this, it is suggested that strophanthin for clinical use be dissolved in 0.02 M standard phosphate solution at p_H 7.0 and marketed in hard glass ampoules.—J. Exper. Med. 1919, v. 31, p. 267–273; Proc. Soc. Exper. Biol. & Med. 1919, v. 17, p. 63–64.

Heffter, A.: An investigation of the stability of sterilized solutions of medicaments in ampoules. Solutions of strophanthin maintained their activity unimpaired for a period of 13 months.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 142–146.

Éwe, G.: Two lots of strophanthin examined were not very soluble, since even minute quantities dissolved very slowly although completely. The U. S. P. requires strophanthin to be readily soluble in water.—J. Am. Pharm. Assoc. 1919, v. 8, p. 757.

Samaan, Karam: The toxicity of strophanthin isolated from the seeds of *Strophanthus Kombé* was found to be practically identical with that of strophanthin Merck. The oral m. l. d. was about twenty times that given by intralymphatic injection.—Pharm. J. Lond. 1919, v. 103, p. 66–67.

Levine, Samuel A.: A historical review of the pharmacological work on digitalis bodies and an account of experiments carried out to determine the action of strophanthin on the cat's heart. A comprehensive bibliography and plates are appended.—J. Exper. M. 1919, v. 29, p. 485–512.

Stewart, G. N., and Rogoff, J. M.: From experiments, it is concluded that strophanthin has no decided or constant effect upon the adrenaline output.—J. Pharmacol. & Exper. Therap. 1919, v. 13, p. 361–396.

STROPHANTHUS.

Holmes, E. M.: It is stated to be impossible to separate the seeds of *Strophanthus Courmontii* and its varieties from the seeds of *Strophanthus Kombé* with the naked eye unless the seeds are in the pods. As it has been impossible to obtain pure seed of *Strophanthus Kombé* in commerce for some years, it is suggested that the British Pharmacopœia also recognize the seed of *Strophanthus hispidus*, which is more widely distributed and more easily obtained.—Pharm. J. Lond. 1919, v. 102, p. 33–34.

Gilg, Ernst, and Schuster, Julius: An investigation of the sulphuric acid reaction for the identification of strophanthus seed.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 220–233.

Boehrisch: A modification of Schraub's method for the identification of strophanthus seeds is described. The reagent used consists of eight parts of sulphuric acid diluted with two parts of water.—Pharm Ztg. 1918, p. 318, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 35.

Samaan, Karam: An experimental study of *Strophanthus Kombé* seeds. I. An investigation of the activity of the oil present in the seeds, and of the existence or nonexistence in the defatted seeds of a physiologically active body beside the water-soluble strophanthin. II. The determination of the M. L. D. of K. Strophanthin isolated in the laboratory, Strophanthin Merck and tincture of strophanthus, B. P. 1914. III. The assay of tincture of strophanthus by the methods of Elborne, Fraser, Barclay, Fromme, and Lampart and

Mueller.—Pharm. J. Lond. 1919, v. 103, p. 66–67; Year-Book of Pharm. & Trans. 1919, p. 344–350.

Blomberg, Johannes: A review of a doctor's thesis dealing with the examination of strophanthus seeds and galenical preparations made therefrom.—Pharm. Zentralh. 1919, v. 60, p. 59–60.

Anon.: It is reported by the Bureau of Chemistry that in some importations of "strophanthus seed," the seeds of *Strophanthus sarmentosus* P. D. C. were substituted partially or wholly for the true material. The embryo of the latter contains no crystals of calcium oxalate and gives a green color when treated with 80 per cent sulphuric acid, while the former has abundant crystals of the oxalate and gives a red color with the 80 per cent sulphuric acid.—S. R. A. Chem. 1918, No. 23, p. 99.

Joachimoglu, G.: Data relative to the physiological assay of strophanthus and digitalis tinctures of different origin are given.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 170–199, through J. Soc. Chem. Ind. 1919, v. 38, p. 387A.

Galli, Giovanni: Notes on the dosage and methods of administration of heart tonics over long periods.—Presse Médicale, 1919, v. 27, p. 43.

STRYCHNINA.

Ciusa, R., and Ciamician, G.: A report of researches on strychnine and brucine, with special reference to isostrychnine and its derivatives.—Atti accad. Lincei, 1919, v. 28, p. 185–187.

Buc, H. E.: A delicate test for strychnine is based on the fact that the alkaloid or any of its salts gives a red color when treated under the proper conditions with zinc amalgam, hydrochloric acid, and potassium ferriçyanide. In the absence of interfering substances 0.001 milligram of strychnine can be detected by this method.—J. Assoc. Off. Agric. Chem. 1919, v. 3, p. 193.

Ward, T. J.: Rapid determination of solubility. Data are given showing the solubility of strychnine in benzene.—Analyst (The), London, 1919, v. 44, p. 137.

Cushny, A. R.: Note on strychnine tetanus. Strychnine tetanus is merely a quantitative change of the "start" reflex which occurs under normal conditions.—Quart. J. Exper. Physiol. 1919, v. 12, p. 153–156.

STRYCHNINÆ SULPHAS.

Anon.: The crystal water content of samples of strychnine sulphate examined was found to vary between 10.4 and 11.6 per cent, corresponding to 5 and 5½ molecules of water.—Evans' An. Notes, 1919, p. 95.

Cabannes, E.: Attention is directed to the incompatibility of strychnine sulphate with sodium cacodylate. Precipitation occurs when aqueous solutions of the two salts are mixed, owing to the slight solubility of the strychnine cacodylate which is formed.—Répert. Pharm. 1919, v. 30, p. 193–194.

Bertrand, R.: A note on the incompatibility of sodium cacodylate with strychnine sulphate. A method for preparing solutions containing a combination of these salts is described.—Bull. sc. pharmacol. 1919, v. 26, p. 407–410.

Fleury, P., and Hourvitz, M.: Notes on the incompatibility of strychnine sulphate with sodium cacodylate and with sodium glycerophosphate. Precipitation may be avoided by adding hydrochloric acid in an amount equal to 60 per cent of that required for complete neutralization.—J. pharm. et chim. 1919, v. 20, p. 369–374.

Fuller, H. C.: The conclusions arrived at from a study of the values obtained by collaborating chemists in the analysis of preparation commonly prescribed by physicians indicate that the determination of strychnine by titration can not be recommended.—J. Assoc. Off. Agric. Chem. 1919, v. 3, p. 188–193.

Holt, Thomas: Of 7 samples of strychnine sulphate examined, 1 was below the standard set by the U. S. P.—Rep. Connecticut D. & F. Com. 1919, p. 21.

STYRAX.

Watermeyer, F. E.: An account of the collection of American liquid storax. Data showing the saponication and acid numbers of the purified balsam are given.—Spatula, 1919, v. 25, p. 417–418.

Snyder, J. P.: The only difference between South American storax and the true product is stated to be the acid number. The acid number was found to be about 40, while the Pharmacopœia specifies a minimum of 56. The total cinnamic acid content was found to be about 33 per cent.—Proc. Am. Drug Mfg. Assoc. 1919, p. 275–276.

Tsuchihashi, R., and Tasaki, S.: A report of the results of the examination of two natural resins from *Liquidamber Formosana.*—J. Chem. Ind. Tokyo, 1919, v. 22, p. 288–295, through J. Soc. Chem. Ind. 1919, v. 38, p. 646A.

Tschirch, A.: Analytical data relative to the composition of the resinol of storax are presented.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 64–65.

Henze, M.: It is stated that the "storesinol" of Tschirch and van Itallie is mostly abietic acid. This is said to be a regular constituent of storax, the author having found 30 per cent of free acid in a prewar sample of 1913.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 351–354; see also A. Tschirch, ibid. p. 355–356.

van Itallie and Lemkes: A method for the determination of cinnamic acid in storax is described.—Pharm. Zentralh. 1919, v. 60, p. 10.

Ewe, G.: Four lots of storax examined yielded the following results: The insoluble matter ranged from 1.43 to 2.20 per cent, nonvolatile alcohol-soluble matter from normal to 87.9 per cent, and acid value 99.9 to 150 per cent. The U. S. P. requires not more than 2.5 per cent insoluble matter, not less than 60 per cent nonvolatile alcohol-soluble matter, and an acid value of 56 to 85.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 91.

Anon.: Of 40 samples of storax examined, only 2 were of Ph. Brit. strength. Only two samples yielded as much as 22 per cent of balsamic acids. The water content of the samples varied up to 29 per cent and some of them contained alcohol-insoluble matter up to 8 per cent.—Evans' An. Notes, 1919, p. 93.

SUCCUS CITRI, N. F.

Harden, A., and Robinson, R.: The technical details in the preparation of concentrated juices from oranges, limes, and apples are described. The antiscorbutic principle is not destroyed at 40° C., nor is it volatile at that temperature.—J. Roy. Army M. Corps, 1919, v. 32, p. 48–56, through Physiol. Abstr. 1919, v. 4, p. 88.

Collier, F. C.: A report of the examination of 60 samples of lime juice. The results of an investigation of the methods employed for the determination of total solids are stated. A note on preservatives is added.—Bull. Lab. Dept. Trade & Commerce, Ottawa, Canada, 1919, no. 429.

Smith, Alice H.: A historical study of the use of lime juice as an antiscorbutic.—J. Roy. Army M. Corps, 1919, v. 32, p. 93–117, through Physiol. Abstr. 1919, v. 4, p. 88.

SULPHONMETHANUM.

Falck, A.: A table is given showing the quantities of different solvents required to effect the solution of 1 gram of sulphonal.—Pharm. Zentralh. 1919, v. 60, p. 409–416.

Sanchez, J. A.: A method for the identification of the disulphones used in pharmacy and medicine is based on the fact that they can be easily converted into iodoform, which can readily be identified by its odor and appearance.—El Restaurador farm. 1918, No. 3, through Ann. chim. anal. chim. appl. 1919, v. 1, p. 228–229.

Schamelhout, A.: A criticism of an article by Sanchez on the identification and testing of disulphone compounds used in medicine. An abstract.—J. Pharm. Belgique, April 13, 1919, through Répert. Pharm. 1919, v. 30, p. 215.

SULPHUR SUBLIMATUM.

Noyer: An investigation of the different varieties of sulphur flowers and sublimed sulphur. Commercial varieties of sulphur flowers examined contained 13 to 33 per cent of sulphur insoluble in carbon disulphide.—Caoutchouc et Gutta-Percha, 1918, v. 15, p. 9661, through J. Soc. Chem. Ind. 1919, v. 38, p. 41A.

Chappuis, P.: Data relative to the determination of the boiling point of sulphur by means of the nitrogen thermometer are presented.—Sci. Abstr. 1919, v. 22A, p. 382.

Mueller, E. F., and Burgess, H. A.: Experimental data relative to the standardization of the sulphur boiling point are presented.—Sc. Papers, Bur. Stand. 1919, No. 339, p. 163–184.

Beckmann, E., et al.: An investigation of the influence of the different modifications of sulphur on its melting point.—Ztschr. anorg. Chem. 1918, v. 103, p. 189–206.

Anon.: Camphor is stated to be an excellent solvent for sulphur and to increase the solubility of the latter in oils. Sulphur dissolves in 5 parts of melted camphor and the resulting solution dissolves readily in vegetable oils and petrolatum.—Bull. Pharm. 1919, v. 33, p. 40.

SUMBUL.

Hommell, P. E.: Sumbul should be deleted from the U. S. P., as it possesses little therapeutic value.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SUPPOSITORIA.

Anon.: A paper discussing the art of making good suppositories.—N. A. R. D. J. 1919, v. 27, p. 1022–1023.

Terry, H.: Cacao butter diluted with 20 per cent of kaolin, or kaolin with a decoction of Irish moss (2 in 100) make excellent suppository masses.—Apoth.-Ztg. 1918, p. 220, through Pharm. Weekblad, 1919, v. 56, p. 192.

Behrbalk, Leo: A mixture which can be employed in making cast suppositories consists of 1 part of spermaceti and 3 parts of olive oil. The mass melts at 37.2° C.—Pharm. Post, 1918, v. 51, p. 562, through Chem. Zentralbl. 1918, v. 2, p. 760.

Pérez de Albéniz, L.: Notes on the preparation of suppositories of tannic acid.—Farm. Españ. 1919, v. 51, p. 88–89, 104–105.

SUPPOSITORIA BOROGLYCERINI, N. F.

Hommell, P. E.: It is suggested that the suppositories of boroglycerin, N. F., be placed with the suppositories of glycerin, U. S. P., and that other formulas for suppositories which are often prescribed for pathological conditions be included.—Proc. New Jersey Pharm. Assoc. 1919, p. 45.

SUPRARENALUM SICCUM.

Emmett, A. D., and Luros, G. O.: Results obtained in feeding experiments indicate that the therapeutic value of desiccated suprarenal gland can not be attributed to fat-soluble A vitamine.—J. Biol. Chem. 1919, v. 38, p. 441–447.

Piccinini, Prassitele: Chemical incompatibilities of adrenaline. In the presence of ferrous salts or arsenates, pure adrenaline solutions lose their mydriatic power completely in 30 days. Extracts of the entire suprarenal gland retain their activity under the same conditions.—Arch. pharmacol. sper. 1919, v. 27, p. 3–16.

Heisler, R.: Suggestions for the Austrian pharmacopœia. IX. An absolutely colorless adrenaline solution is demanded. Brown, red, or cloudy solutions should be rejected. The acidity limit should be fixed at 0.25 cubic centimeter of tenth normal NaOH solution per 5 cubic centimeters of 1 per cent adrenaline solution, using methyl orange as the indicator.—Pharm. Post, 1918, v. 51, p. 677–678, through Chem. Zentralbl. 1919, v. 2, p. 208–209.

Denigès: If 0.5 gm. of sodium acetate is added to 5 cubic centimeters of a solution containing 0.003 gm. of adrenaline in 1,000 cubic centimeters, and two drops of a 5 per cent solution of mercuric chloride are added a definite pink coloration will be produced within a few minutes.—Bull. soc. pharm. Bordeaux, 1918, v. 56, p. 185, through Répert. Pharm. 1919, v. 30, p. 64.

van Leeuwen, W. S., and von der Made, M.: An investigation of the differences in adrenaline preparations of varying origin. Tests of increase in blood pressure were made with decerebrated and decapitated cats and rabbits. These tests were preferred to the U. S. P. method using narcotized dogs.—Ned. Tijdskr. Geneesk. 1918, v. 2, p. 1961–1963, through Zentralbl. Biochem. & Biophys. 1919, v. 20, p. 436.

von Groer, Franz: Attention is called to the employment of the vasoconstrictor properties of adrenaline as a means of standardizing adrenaline preparations.—Ztschr. exper. Med. 1918, v. 7, p. 237–250.

Macht, D. I.: Laevo-rotatory epinephrine stimulated the ureteral contractions and raised the uteral tonus much more than the racemic variety.—J. Pharmacol. & Exper. Therap. 1918, v. 12, p. 255–265.

Marie, A.: A study of the mode of action of adrenaline in the neutralization of bacterial toxins.—Ann. inst. Pasteur, 1919, v. 33, p. 645–656.

Wearn, Joseph T., et al.: Studies on epinephrine. I. Effects of the injection of epinephrine in soldiers with "irritable heart." II. The effects of epinephrine on the basal metabolism in soldiers with "irritable heart," in hyperthroidism, and in normal men. III. Effect of epinephrine on the electrocardiograms of patients with "irritable heart."—Arch. Int. Med. 1919, v. 24, p. 247-294.

SYRUPI.

Désesquelle: It is proposed to modify the Ph. Fr. formulas for the syrups of belladonna, aconite, digitalis, henbane, and stramonium so that one teaspoonful will constitute a dose.—Répert. Pharm. 1919, v. 30, p. 362.

Anon.: A "nitrogen syrup" is made by digesting brewers' yeast for three or four hours at a temperature of 50 to 55° and filtering. The resulting product contains 2.4 per cent of protein.—Bull. Pharm. 1919, v. 33, p. 40.

Miller, H. L.: Three formulas are given for the preparation of red coloring materials for syrups.—Spatula, 1919, v. 26, p. 98.

SYRUPUS.

Cordonnier, Em.: Tables and graphs are presented showing the quantities of sugar and water to be used in the preparation of syrups of different densities, also the total weight and volume of the resulting product.—Bull. sc. pharmacol. 1919, v. 26, p. 316-324.

SYRUPUS ACIDI HYDRIODICI.

Jongwald, Mattys: Thirteen of 15 samples of syrup of hydriodic acid analyzed contained less than 1.3 gm. of hydriodic acid per 100 cubic centimeters of syrup. The minimum hydriodic acid content per 100 cubic centimeters was 1.05 gm. and the maximum 1.52 gm. The specific gravity of the samples varied from 1.153 to 1.370 at 25° C.—Proc. North Dakota Pharm. Assoc. 1919, p. 57.

SYRUPUS ALLII, N. F.

Hommell, P. E.: Syrup of garlic is so seldom employed that it would seem prudent to delete it from the N. F.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

SYRUPUS ALTHÆÆ, N. F.

Hommell, P. E.: Syrup of althea is so seldom called for that it should be deleted from the N. F.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

SYRUPUS AURANTII.

Hommell, P. E.: In the formula for syrup of orange, the oil of orange peel should replace tincture of orange peel. Glycerin should be added to insure stability and the density should be increased.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

SYRUPUS AURANTII FLORUM.

Hommell, P. E.: As a vehicle, syrup of orange flowers is unpopular, being sickening to most patients who prefer the more agreeable syrup of orange peel.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

SYRUPUS CALCII ET SODII HYPOPHOSPHITUM, N. F.

Scoville, Wilbur L.: Syrup of calcium and sodium hypophosphites precipitates on standing due to the use of an excessive amount of sugar in its preparation.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

SYRUPUS CALCII IODIDI, N. F.

Scoville, Wilbur L.: A purity rubric should be given for syrup of calcium iodide. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

SYRUPUS CALCII LACTOPHOSPHATIS.

Hommell, P. E.: Syrup of calcium lactophosphate requires no further change in the formula, as the addition of 50 cubic centimeters of glycerin to the liter now directed insures stability.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SYRUPUS CODEINÆ, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for syrup of codeine. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

SYRUPUS ERIODICTYI AROMATICUS, N. F.

Hommell, P. E.: There are sufficient aromatics in aromatic syrup of yerba santa without sassafras. Some glycerin should be included in the formula for its solvent and preservative properties.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

SYRUPUS FERRI ET MANGANI IODIDI, N. F.

Scoville, Wilbur L.: A purity rubric should be given for syrup of iron and manganese iodide. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. M. Assoc. 1919, v. 8, p. 746.

SYRUPUS FERRI IODIDI.

Hommell, P. E.: The present formula for syrup of iodide of iron is very satisfactory and when preserved as directed is a dependable product of great value in the hands of the physician.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

Jongwald, Mattys: Of 26 samples of syrup of ferrous iodide examined, 10 were of U. S. P. quality. The average ferrous iodide content was 4.74 per cent. The U. S. P. allows not less than 4.75 per cent nor more than 5.25 per cent of ferrous iodide.—Proc. North Dakota Pharm. Assoc. 1919, p. 56–57.

SYRUPUS GLYCYRRHIZÆ, N. F

Hommell, P. E.: It is claimed by some that syrup of licorice does not keep well and that they are, therefore, forced to use another formula than that given in the N. F. The author believes that no trouble will be experienced if the syrup is made strictly according to directions and kept in a cool place, or suggests that it could be prepared extemporaneously when wanted.—Proc. New Jersey Pharm. Assoc. 1919, p. 41.

SYRUPUS IODOTANNICUS, N. F.

Brémen, F.: After a description of the various ways in which syrup of iodotannin is supplied in dispensing, the author gives a simple method for its preparation.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 70.

Anon.: A discussion of two formulas for the preparation of syrup of iodotannin.—Am. Drug. 1919, v. 67, No. 12, p. 40.

Anon.: Notes on a method for the preparation of syrup of iodotannin.—Schweiz. Apoth.-Ztg. 1919, v. 56, p. 143.

Ewe, George E.: A method for the assay of syrup of iodotannin is essentially a modification of the direct titration of iodides by standard silver nitrate and potassium sulphocyanide.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 175–176.

SYRUPUS IPECACUANHÆ.

Hommell, P. E.: As suggested by Mr. Beringer, syrup of ipecac should be prepared direct from the powdered drug.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SYRUPUS LACTUCARII.

Hommell, P. E.: Syrup of lactucarium should be deleted from the U. S. P., as its anodyne and hypnotic properties are too mild to make it useful as a therapeutic agent. It is rarely prescribed.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SYRUPUS PICIS LIQUIDÆ.

Hommell, P. E.: Syrup of tar can well be spared from the U. S. P. as it is seldom prescribed, other and better agents replacing it now.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SYRUPUS PINI STROBI COMPOSITUS, N. F. III.

Scoville, Wilbur L.: Compound syrup of white pine precipitates organic matter on standing. A change in constituents may be necessary to prevent precipitation. Such a change may not, however, be practicable.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

Hommell, P. E.: Syrup of white pine compound can be improved by omitting the aralia, which has little or no therapeutic value in this compound, and replacing it with horehound, a good expectorant. It is believed that sassafras in the formula is unnecessary, as sufficient stimulant and aromatic action is derived from the oil of sassafras.—Proc. New Jersey Pharm. Assoc. 1919, p. 57.

Anon.: Information is requested for the purpose of ascertaining why the chloroform directed to be used in this preparation settles to the bottom and does not mix with the syrup.—Am. Druggist, 1919, v. 67, No. 12, p. 41.

SYRUPUS PRUNI VIRGINIANÆ.

Hommell, P. E.: The U. S. P. should direct that syrup of wild cherry be kept in amber-colored bottles in a cool place.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

SYRUPUS QUINIDINÆ, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for syrup of quinidine. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F. J. Am. M. Assoc. 1919, v. 8, p. 746.

SYRUPUS RHEI.

Hommell, P. E.: In preparing syrup of rhubarb, the powdered drug should be directed to be used instead of the fluid extract. An entirely satisfactory syrup will then be obtained.—Proc. New Jersey Pharm. Assoc. 1919, p. 46.

SYRUPUS SANGUINARIÆ, N. F.

Hommell, P. E.: Syrup of sanguinaria is unsatisfactory unless some glycerin is added to improve and preserve it. Sanguinaria seems to act better in combination with other expectorants than when exhibited alone.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

SYRUPUS SARSAPARILLA COMPOSITUS.

Hommell, P. E.: The dose of compound syrup of sarsaparilla is given as 4 drachms; syrup of senna, 1 drachm. The latter dose is one-fourth of the maximum dose, which is 4 drachms. Why not one-fourth of the maximum dose for the compound syrup of sarsaparilla?—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

SYRUPUS SENEGÆ.

Hommell, P. E.: Syrup of senega can be improved by the addition of 15 per cent of glycerin.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

SYRUPUS STILLINGIÆ COMPOSITUS, N. F.

Scoville, Wilbur L.: Compound syrup of stillingia precipitates organic matter on standing. A change in constituents may be necessary to prevent this.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

SYRUPUS TOLUTANUS.

Anon.: A method for the extemporaneous preparation of syrup of tolu is given.—Farm. Españ. 1919, v. 51, p. 327.

TALCUM PURIFICATUM.

Grohmann, Adolf: A discussion of the origin of the word "talc" and its use in the literature.—Chem. Ztg. 1919, v. 43, p. 51.

Anon.: A note on the production of talcum in south Africa in which statistics showing the amount produced are given.—Schweiz. Apoth.-Ztg. 1919, v. 56, p. 145–146.

Hackl, O.: A microchemical method for distinguishing between sericite and talc is described.—Verh. geol. Reichanst. Wien. 1918, p. 1, through Chem. Abstr. 1919, v. 13, p. 2836.

Sollmann, Torald: Talcum, used as a dusting powder, is found to absorb 61 per cent of its weight of water.—J. Am. M. Assoc. 1919, v. 72, p. 935–936.

TARAXACUM.

Alsberg, Carl L., et al.: In several instances a root, possibly that of a species of *Lactuca* or *Sonchus*, has been substituted for the root of *Taraxacum officinale* L.—J. Am. Pharm. Assoc. 1919, v. 8, p. 470.

TEREBENUM.

Howard, Bernard F.: A discussion of pharmacopœial standards for terebene. It is concluded that the optical rotation test for terebene is no criterion of purity, and the same applies to a great extent to the specific gravity. The distillation test is a standard stated to be reliable, easy to apply, and impossible to evade by subterfuges. Suggestions for the alteration of the Ph. Brit. tests are given.—Pharm. J. Lond. 1919, v. 103, p. 76–78; Chem. & Drug. 1919, v. 91, No. 30, p. 95; Year-Book of Pharm. & Trans. 1919, p. 386–393.

TERPINI HYDRAS.

Aschan, Ossian: Notes on the formation of terpin hydrate and terpineol. A report of experiments carried out for the purpose of devising new methods of preparing terpene from pinene and dipentene.—Bidrag känn. Filands naturoch folk, 1918, v. 77, p. 30, through Chem. Zentralbl. 1919, v. 90, part 1, p. 284–285.

TERRA SILICEA PURIFICATA.

Howchin, Walter: A report of an examination of diatomaceous earth from Lord Howe Island.—Chem. Abstr. 1919, v. 13, p. 827.

Éwe, G.: Of 20 samples of kieselguhr examined, 8 were strictly U. S. P.; 6 showed slightly more loss upon ignition than the 10 per cent allowed by the U. S. P., but not above 11 per cent; the other 6 showed a loss of 11.4 to 23.4 per cent. All of the 20 samples were calcined kieselguhrs, but a few gave a slight amount of smoke upon ignition, indicating insufficient calcination.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 86; J. Am. Pharm. Assoc. 1919, v. 8, p. 673.

Blomberg, J.: "Norite" is stated to be a better absorbent than infusorial earth or wood charcoal, and to have a wider range of adaptability.—Pharm. Weekblad, 1919, v. 56, p. 788–790.

THEOBROMINÆ SODIO-SALICYLAS.

Mossler, Gustav: Notes on the testing of theobromine sodio-salicylate with reference to the tests which should be given in the new edition of the Ph. Germ.—Ztschr. allgem. österr. Apoth.-Ver. 1919, v. 57, p. 149–150, 155–156, through Chem. Zentralbl. 1919, v. 4, p. 950.

Bayer: A method for the evaluation of theobromine sodio-salicylate consists of dissolving 1 gram of the material in 10 cubic centimeters of water and passing in carbon dioxide to saturation. The precipitate is collected on a weighed filter dried at 100° and weighed. The weight should be at least 0.4 gram.—Pharm. Post, 1918, v. 51, p. 558, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 36.

Carcano, L.: A note on the method of the Ph. Ital. for the assay of diuretin.—Boll. chim.-farm. 1919, v. 58, p. 21–22, 161.

Anon.: Analytical data obtained in the assay of commercial samples of theobromine sodio-salicylate are presented. The method of assay employed is described in detail.—Evans' An. Notes, 1919, p. 98–101.

THYMOL.

Moles, E., and Marquina, M.: To determine thymol in aqueous solutions, add sodium bicarbonate and run in an excess of tenth normal iodine volumetric solution. After making acid with hydrochloric acid, titrate the uncombined iodine with tenth normal sodium thiosulphate solution. One molecule of thymol is equivalent to 3.6 atoms of iodine under these conditions.—Anales soc. española fis. quim. 1919, v. 17, p. 59–83.

Watts, Sir Francis: Data relative to the preparation of thymol and ajowan oil in Montserrat are presented.—Perf. & Ess. Oil Rec. 1919, v. 10, p. 214–216.

Andrews, C. E.: U. S. patent No. 1,306,512. A method for preparing thymol from aminocymene.—Chem. Abstr. 1919, v. 13, p. 2040.

Nogouchi, R.: Thymol poisoning following the treatment of hookworm. The main symptom was intense hemoglobinuria, with increase of leucocytes.—Japanese Med. Lit. 1918, v. 3, p. 19, through Physiol. Abstr. 1919, v. 3, p. 534.

THYMOLIS IODIDUM.

Anon.: It is stated that druggists desiring to manufacture thymol iodide can readily do so by following the directions given in the French Codex.—N. A. R. D. J. 1919, v. 27, p. 505.

Moles, E. and Marquina, M.: An investigation of the composition and structure of the aristols, with some notes on the determination of thymol.—Anales soc. españ. fis. quim. 1919, v. 17, p. 59–83.

THYROIDEUM SICCUM.

van Os: Data relative to the moisture and iodine content of the thyroid glands of the pig and sheep are presented. The iodine content of pig glands varied between 0.355 and 0.38 per cent. computed on the dry material; that of the sheep glands between 0.15 and 0.266 per cent.—Pharm. Ztg. 1918, v. 63, p. 608, through Schweiz. Apoth.-Ztg. 1919, v. 57, p. 587.

Kendall, E. C.: The isolation and properties of the active iodine compound of the thyroid are described. The name thyroxin has been given to this compound.—J. Biol. Chem. 1919, v. 39, p. 125–147, 265–334.

Rogoff, J. M.: The preparation of a concentrated active product of the thyroid gland, which is soluble in water, is briefly described.—J. Pharmacol. & Exper. Therap. 1918, v. 12, p. 207–209.

Swingle, W. W.: A comparative study of the physiological action of iodine and thyroid gland.—J. Exper. Zoology, 1919, v. 27, p. 397–417, through Chem. Abstr. 1919, v. 13, p. 877.

Kendall, E. C.: A report on the physiological action of the active principle of the thyroid. Thyroxin is found to have two distinct functions: it increases the metabolic rate due to the CO-NH group and accelerates metamorphosis due to the iodine in the molecule.—Am. J. Physiol. 1919, v. 49, p. 136–137; Endocrinology, 1919, v. 3, p. 156–163.

Anon.: A brief review of the history of the use of the thyroid gland in therapeutics with notes on the chemical studies which have been made.—Therap. Notes, 1919, v. 26, p. 4–6.

TINCTURÆ.

Davy, Edward D.: Some facts concerning the preparation of tinctures by the dilution of fluid extracts. In conclusion, it is stated that the individual preparations should be thoroughly studied before making any dilutions of this nature.—J. Am. Pharm. Assoc. 1919, v. 8, p. 112–114.

Raymer, William: The preparation of homeopathic tinctures is described.—Hahnemann. Month. 1919, v. 54, p. 158–163.

Bodinus: Notes on the preparation of tinctures. It is stated that the directions for preparing 24 of the 41 tinctures of the Ph. Germ. should be revised. A general method of preparation, the primary advantage of which is the saving of alcohol, is described. See also Apoth.-Ztg. 1919, v. 34, p. 72 and 436. See also O. Anselmino, ibid. p. 139–140.

Eschbaum, F.: A new method for the determination of extractive matter in tinctures and fluidextracts is described. The procedure differs from ordinary methods in that the liquid is dried on filter paper.—Ber. deutsch. pharm. Gesellsch. 1918, v. 28, p. 417–419, through J. Soc. Chem. Ind. 1919, v. 38, p. 157A.

Chodat, R.: A description of a method for distinguishing between "dialysés," preparations made from fresh plants, and tinctures which are made from the dried drug. The method is essentially a test for the presence of peroxidase.—Schweiz. Apoth.-Ztg. 1919, v. 56, p. 137–140.

Partridge, W.: The density and total solids were determined in a number of commercial samples of compound tincture of rhubarb, Ph. Brit. 1914, in order to discover what divergence, if any, might develop when compared with the preparation of the 1908 Ph. Brit.-Analyst (The), London, 1919, v. 44, p. 369–370.

TINCTURA ACONITI.

Anon.: A sample of tincture of aconite examined by the Bureau of Chemistry contained only 0.03 gram of aconitine per 100 cubic centimeters instead of 0.045 as provided by the U. S. P.—S. R. A. Chem. Suppl. 1918, No. 30, p. 631–634.

TINCTURA ALOES.

Hommell, P. E.: The proper place for tincture of aloes, which is seldom prescribed, is in the N. F. with the tincture of aloes and myrrh.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

TINCTURA ANTIPERIODICA, N. F.

Scoville, Wilbur L.: Antiperiodic tincture precipitates on standing. This may be due to excessive acidity. The use of another salt of quinine may possibly inhibit or prevent precipitation.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

TINCTURA ARNICÆ.

Hommell, P. E.: Tincture of arnica should be directed to be made from a standard fluidextract, as this arrangement would save menstrum, labor, and time.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

TINCTURA BELLADONNÆ FOLIORUM.

Anon.: The Ph. Brit. recognizes belladonna leaves which contain as low as 0.3 per cent of alkaloids, while the tincture, which is 1 in 10, is required to contain not less than 0.035 per cent of alkaloid.—Evans' An. Notes, 1919, p. 27–28.

TINCTURA BENZOINI COMPOSITA.

deG. Peacock, J. C., and B. L.: A report of an investigation to determine the nature of the volatile products obtained when the compound tincture of benzoin is distilled with steam.—J. Am. Pharm. Assoc. 1919, v. 8, p. 482–486.

Hommell, P. E.: The author once more directs attention to the fact that gum myrrh should replace aloe in the formula for tincture of benzoin compound. Aloe in vapor form contributes no healing, antiseptic, or sedative action to the membranes of the naval cavities and throat. If anything, it is irritating.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

TINCTURA BRYONIÆ, N. F.

Hommell, P. E.: The average dose of tincture of bryony is given as one drachm. This is a full dose. One-half of this amount would be proper as in the case of tincture of cactus. In this instance the dose is 15 minims and a full dose is 30 minims.—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

TINCTURA CALENDULÆ, N. F.

Hommell, P. E.: Tincture of calendula should not be given a place in the N. F., as, internally, it has little or no effect and its reputed value externally is no doubt due to the alcohol.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

TINCTURA CALUMBÆ.

Hommell, P. E.: It has been suggested that tincture of calumba be deleted from the U. S. P., but this would be unfortunate, as it is not only a valuable bitter which promotes appetite and imparts digestive tone, but it is also compatible with iron preparations.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

TINCTURA CANTHARIDIS.

Nitardy, F. W.: The use of potassium hydroxide is recommended in the preparation of tincture of cantharides in order that a product may be obtained which is soluble in 50 per cent alcohol.—J. Am. Pharm. Assoc. 1919, v. 8, p. 1030–1031.

TINCTURA CARDAMOMI.

Hommell, P. E.: As a flavor and carminative, tincture of cardamom is exhibited so much less than the compound tincture, which is far superior, that it is believed it should be placed in the N. F. The cochineal, however, in the compound tincture should be replaced by cudbear, as the cochineal is incompatible with free acid, separating insoluble carminic acid noticeable in quinine mixtures, etc.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

TINCTURA CINCHONÆ COMPOSITA.

Nitardy, F. W.: A revised formula for the preparation of compound tincture of cinchona is presented. The preparation is made in two portions for the purpose of allowing the adjustment of the alkaloidal strength without diminishing the amounts of other constituents contained in the finished product.—J. Am. Pharm. Assoc. 1919, v. 8, p. 114–115.

McElhenie, Thomas B.: The addition of 1 per cent hydrochloric acid to the tincture of cinchona compound is recommended. The tincture prepared in this manner was found by experimentation to be much more stable than one prepared by the present U. S. P. method.—J. Am. Pharm. Assoc. 1919, v. 8, p. 557.

TINCTURA CROCI, N. F.

Hommell, P. E.: The dose of tincture of saffron is not given in the N. F., yet it is employed as a therapeutic agent.—Proc. New Jersey Pharm. Assoc. 1919, p. 40.

TINCTURA DIGITALIS.

Schmidt, James M., and Heyl, Frederick W.: Experimental data in the form of tables showing the stability of tincture and fluidextract of digitalis prepared by extracting the leaf with menstrua of different alcoholic strength.—Am. J. Pharm. 1919, v. 91, p. 425–436.

Joachimoglu, G.: Results obtained in the physiological evaluation of specimens of the tinctures of digitalis and strophanthus by observing the lethal dose for the male frog according to Heffter's method are presented and discussed.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 170–199.

TINCTURA FERRI CHLORIDI.

Monforte, R.: A note on the preparation of Bestuscheff's ethereal tincture of iron.—Boll. chim.-farm. 1919, v. 58, p. 2.

Mayer, Joseph L.: In assaying tincture of ferric chloride for the iron content it is better to use the 3 cubic centimeters of hydrochloric acid to dissolve the residue and then wash into a glass-stoppered flask with 25 cubic centimeters of distilled water than to proceed as directed in the U. S. P.—Proc. New York Pharm. Assoc. 1919, p. 58.

Jongwald, Mattys: The analysis of 96 samples of tincture of ferric chloride showed a metallic iron content ranging from 2.80 per cent to 6.24 per cent. The specific gravity of these samples varied from 0.8008 to 1.0480 at 25° C. Thirty-eight were below standard.—Proc. North Dakota Pharm. Assoc. 1919, p. 56.

Bailey, E. N.: Two samples of tincture of ferric chloride examined differed from the U. S. P. standard in iron and alcohol content.—Rep. Connecticut Agric. Exper. Sta. 1919, Bull. No. 210, p. 239.

TINCTURA FERRI CITRO-CHLORIDI, N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for tincture of ferric citro-chloride. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. M. Assoc. 1919, v. 8, p. 746.

TINCTURA FERRI POMATA N. F.

Scoville, Wilbur L.: A purity rubric should be prescribed for tincture of ferrated extract of apples. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. M. Assoc. 1919, v. 8, p. 746.

TINCTURA GENTIANÆ COMPOSITA

Hommell, P. E.: The present formula for compound tincture of gentian is perfectly satisfactory if the alcohol employed is free from by-products. Deodorized alcohol should really be used, as it would improve the aroma and taste of this valuable tincture.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA IODI.

Mossler, G.: Changes are suggested in the Ph. Germ. formula for the preparation of tincture of iodine. Stabilization by means of alkali iodides is recommended. Testing the tincture stabilized in this manner must include the estimation of free iodine and acid and the content of alkali iodide.—Pharm. Post, 1918, v. 51, p. 793–794, 801–804, 813–815, through Chem. Zentralbl. 1919, v. 2, p. 301.

Sollmann, T.: A study of water-soluble tinctures of iodine devoid of KI or NaI. A number of formulas for making tinctures of this nature are given. They are said to be superior to the U. S. P. tincture, the KI producing local irritation.—J. Am. Pharm. Assoc. 1919, v. 8, p. 534–535.

Schoorl, N., and Regenbogen, A.: Data showing the solubility of iodine in alcohol and water mixtures are presented in the form of tables and curves. The influence of potassium iodide on the solubility is also shown.—Pharm. Weekblad, 1919, v. 56, p. 538–545.

Angeli, B.: Notes on the preparation of tincture of iodine according to the Ph. Ital. and a comparison of this tincture with similar preparations in other pharmacopœias.—Boll. chim.-farm. 1919, v. 58, p. 289–290.

Raubenheimer, Herbert C.: An account of the history and development of the formula for the preparation of Churchill's tincture of iodine.—Midl. Drug. 1919, v. 53, p. 42–45.

Burrows, F., and Richmond, H. D.: The stability of tincture of iodine containing potassium iodide is stated to be due to the formation of KI_3, which is less active in attacking the alcohol than free iodine.—Pharm. J. Lond. 1919, v. 103, p. 83.

Ferraro, A.: A note on the use of iodic acid as a preservative for tincture of iodine.—Boll. chim.-farm. 1919, v. 58, p. 221–222.

Anon.: The following is the formula for tincture of iodine which will appear in the supplement to the Ph. Fr. V: iodine 10 grams, potassium iodide 4 grams, alcohol (90 per cent) 136 grams.—Répert. Pharm. 1919, v. 30, p. 291–292.

White, William R.: Tincture of iodine prepared with denatured alcohol No. 25 gave a light yellow precipitate when the additional iodine and potassium iodide were added. This proved to be due to the presence of copper. The copper was removed by the addition of a small amount of sodium thiosulphate and subsequent filtration.—J. Am. Pharm. Assoc. 1919, v. 8, p. 558.

Mayer, Joseph L.: The official method under tincture of iodine for the determination of potassium iodide is stated to be unsatisfactory.—Proc. New York Pharm. Assoc. 1919, p. 58.

Bailey, E. M.: Of 17 samples of tincture of iodine examined, 5 were below standard.—Bull. Connecticut Agric. Exper. Sta. 1919. No. 219, p. 244-245.

Jongwald, Mattys: Of 74 samples of tincture of iodine analyzed, the iodine content ranged from 3.37 to 8.30 grams per 100 cubic centimeters. The U. S. P. requires not less than 6.5 nor more than 7.5 grams. Potassium iodide was omitted in quite a number of the samples, and the maximum content was 7.37 grams per 100 cubic centimeters. The U. S. P. allows not less than 4.5 nor more than 5.5 grams.—Proc. North Dakota Pharm. Assoc. 1917, p. 59.

Anon.: A sample of tincture of iodine examined by the Bureau of Chemistry was found to contain iodine, 5.66 parts per 100 cubic centimeters and potassium iodide 3.62 parts. The Pharmacopœia specifies 7 grams of iodine and 6 grams of potassium iodide per 100 cubic centimeters.—S. R. A. Chem. Suppl. 1919, No. 59, p. 494.

TINCTURA IODI DECOLORATA, N. F.

Terry, Robert W.: A study of the chemistry of decolorized tincture of iodine. Three formulæ are recommended in lieu of that given in the N. F. IV.—Midl. Drug. 1919, v. 53, p. 396-398.

TINCTURA IODI FORTIOR, N. F.

Scoville, Wilbur L.: Several complaints have been made that not enough potassium iodide is directed to be used to insure complete solution of all the iodine.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

TINCTURA JALAPÆ, N. F.

Hommell, P. E.: There is no need for tincture of jalap in the N. F., as the compound tincture is the more effective.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

Scoville, Wilbur L.: A purity rubric should be prescribed for tincture of jalap. Definite standards and methods of assay should be attached if this preparation is retained in the next edition of the N. F.—J. Am. M. Assoc. 1919, v. 8, p. 746.

TINCTURA KINO.

Hommell, P. E.: Tincture of kino should be deleted from the U. S. P. and be placed in the N. F., as it is troublesome to prepare and preserve and, furthermore, is not frequently prescribed. The tincture of gambir is a more dependable preparation.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA MOSCHI.

Hommell, P. E.: Tincture of musk should be placed in the N. F., as its chief use is that of a fixer or blender in perfumes. Therapeutically it is of little value.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA MYRRHÆ.

Beckett and Upton: The residue resulting from the manufacture of tincture of myrrh, dissolved in water, is said to make a good mucilage for office or shop work.—Pharm. J. Lond. 1919, v. 102, p. 25.

TINCTURA OPII.

White, Wm. R.: In the U. S. P. assay of tincture of opium, the amount of lime is excessive, as difficulty is encountered in getting sufficient filtrate for the crystallization of the morphine alkaloid.—Proc. Tennessee Pharm. Assoc. 1919, p. 37.

TINCTURA OPII CAMPHORATA.

White, Wm. R.: It is suggested that tincture of camphorated opium be made by using an amount of tincture of opium equivalent to the powdered opium, thus saving three day's time and insuring correctness in the morphine content.—Proc. Tennessee Pharm. Assoc. 1919, p. 37. See also P. E. Hommell, Proc. New Jersey Pharm. Assoc. 1919, p. 47.

Terry, Robert W.: An extemporaneous method for preparing paregoric is described.—Midl. Drug. 1919, v. 43, p. 131.

Anon.: Data obtained by the Bureau of Chemistry in the analysis of a number of samples of paregoric are reported.—S. R. A. Chem. Suppl. 1918, No. 3, p. 651; No. 31, p. 45–48.

TINCTURA OPII DEODORATI.

White, Wm. R.: It is suggested that deodorized tincture of opium be prepared by using paraffin to extract the narcotine instead of purified benzene. The operation is stated to be more simple, less dangerous and more effective.—Proc. Tennessee Pharm. Assoc. 1919, p. 37.

TINCTURA PECTORALIS, N. F.

L. V.: A note states that the morphine in pectoral tincture is precipitated by anisated spirit of ammonia.—Schweiz. Apoth.-Ztg. 1919, v. 57, p. 65.

TINCTURA QUASSIÆ.

Hommell, P. E.: It has been suggested that tincture of quassia be deleted from the U. S. P., but this would be unfortunate, as it is not only a valuable bitter which promotes appetite and imparts digestive tone, but it is also compatible with iron preparations.—Proc. New Jersey Pharm. Assoc. 1919, p. 47.

TINCTURA QUILLAJÆ, N. F.

Hommell, P. E.: As a therapeutic agent, tincture of soap bark is a failure and as a foam for beverages and a saponaceous constituent in dental preparations, it is harmful and its use should be prohibited by law. The only use for soap bark is that of a detergent.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA RHEI AQUOSA, N. F.

Hommell, P. E.: Aqueous tincture of rhubarb is disagreeable to the taste and is, therefore, not very popular.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA RHEI ET GENTIANÆ, N. F.

Hommell, P. E.: Tincture of rhubarb and gentian is disagreeable to the taste and its popularity is, therefore, uncertain.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA SANGUINARIÆ.

Hommell, P. E.: A change was made in U. S. P. IX in the formula for tincture of sanguinaria to insure stability, yet it was scarcely worth while as sanguinaria is seldom used in this form.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA SERPENTARIÆ, N. F.

Hommell, P. E.: Tincture of serpentaria should have been omitted from the N. F. The good effects of this drug can be obtained from the exhibition of Huxham's tincture.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA STRAMONII.

Hommell, P. E.: Tincture of stramonium should be placed in the N. F., for while it is of value as an antispasmodic it is not often prescribed, tincture of belladonna being preferred.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA STROPHANTHI.

Blomberg: Through experiments on dogs, cats, and rabbits, the author has established the fact that oil of strophanthus seed produces severe diarrhœa. A method of preparing the tincture whereby the oil is removed is described.—Pharm. Zentralh. 1919, v. 60, p. 59.

Blomberg: If one drop of a mixture of 1 gram of tincture of strophanthus and 9 grams of water be evaporated to dryness on a water bath and 1 drop of 75 per cent sulphuric acid be added to the cooled residue, a green coloration should be produced in 1 minute.—Pharm. Ztg. 1919, v. 64, p. 54.

Joachimoglu, G.: Results obtained in the physiological evaluation of specimens of the tinctures of digitalis and strophanthus by observing the lethal dose for the male frog according to Heffter's method are presented and discussed.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 170–199.

Rustung, G.: The results obtained in the analysis of 3 samples of tincture of strophanthus are reported.—Norges Apotek. Tiddskr. 1919, v. 27, p. 41–53, through Apoth.-Ztg. 1919, v. 34, p. 122.

Hommell, P. E.: Compared with digitalis, the use of tincture of strophanthus is decreasing, due to the fact that physicians not infrequently find it unreliable. The most approved methods, chemical and physiological should, therefore, be given for the standardization of this tincture.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA SUMBUL, N. F.

Hommell, P. E.: Tincture of sumbul is not to be compared with tincture of valerian in effectiveness as a nervine and antispasmodic, and will, therefore, never become popular.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA VANILLÆ, N. F.

Hommell, P. E.: The transference of tincture of vanilla from the U. S. P. to the N. F. was proper, as its chief use pharmaceutically is to flavor some of the N. F. preparations.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

Scoville, Wilbur L.: The method of preparing tincture of vanilla is unnecessarily complicated and wasteful. Direct percolation of the vanilla, with or without sugar, makes just as good a preparation with much less trouble and expense.—J. Am. Pharm. Assoc. 1919, v. 8, p. 746.

Shaffner, Samuel E.: The author discusses methods for the comminution of vanilla beans. For the preparation of extracts or perfumes, it is recommended that they be chopped instead of ground.—Am. Perf. 1919, v. 13, p. 391.

Smith, Bernard H.: The use of the strong alcoholic menstrum directed by the N. F. IV to be used in the extraction of vanilla beans for the preparation of tincture of vanilla is criticized. The use of this strong alcoholic menstrum adds nothing to the flavor of the extract, but on the other hand renders it unsightly and unsalable.—J. Ind. & Eng. Chem. 1919, v. 11, p. 953–954.

Beringer, Geo. M.: A critical discussion of some statements made by Bernard H. Smith in an article criticizing the N. F. IV method for the preparation of tincture of vanilla.—Am. J. Pharm. 1919, v. 91, p. 799–801.

Dox, Arthur W., and Plaisance, G. P.: A method in which thiobarbituric acid is used for the estimation of vanillin in vanilla extracts which do not contain caramel is described.—Am. J. Pharm. 1919, v. 91, p. 167–170. Reprinted from Simmon's Spice Mill, Nov. 1918.

TINCTURA VIBURNI OPULI COMPOSITA, N. F.

Hommell, P. E.: Compound tincture of viburnum is an excellent preparation and requires no improvement. It is a most dependable nervine and antispasmodic.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TINCTURA ZINGIBERIS.

White, Wm. R.: It is recommended that permission be given in the next edition of the U. S. P. to use any of the five species of ginger officially recognized in the preparation of the tincture, providing the required 2 per cent of oleoresin is obtained.—Proc. Tennessee Pharm. Assoc. 1919, p. 37.

TRAGACANTHA.

Anon.: A condensed account of a report by the revenue commissioner in Mesopotamia on the collection and commerce in tragacanth.—Chem. & Drug. 1919, v. 91, No. 44, p. 65.

Xrayser: Some notes on the origin of the name "gum dragon" and on the commercial sources of the drug.—Chem. & Drug. 1919, v. 91, No. 45, p. 59.

Lloyd, Francis E.: A paper dealing with the origin and nature of the mucilage in cacti and in certain other plants includes some remarks on gum tragacanth.—Am. J. Bot. 1919, v. 6, p. 156–166.

Alsberg, Carl L., et al.: A material which has come upon the market in considerable quantity within the last two years is Karaya gum, sometimes invoiced as Kadaya, Maura, Shiraz, or Indian gum. Karaya gum is obtained chiefly from *Sterculia urens* Roxb. and *Cochlospermum gossypium* D C and also from other closely related species of *Sterculia* and *Cochlospermum*. Its presence may be detected by the U. S. P. IX tests for the purity of gum tragacanth.—J. Am. Pharm. Assoc. 1919, v. 8, p. 468.

TRITICUM.

Small, James: *Triticum repens* is found to be a commercial rarity at the present time. The microscopical characteristics of *Triticum repens* and its chief substitute, *Cynodon dactylon*, are described.—Pharm. J. Lond. 1919, v. 103, p. 73–76; Chem. & Drug. 1919, v. 91, No. 30, p. 94.

Zufall, C. J.: The structure of Bermuda grass is compared with that of triticum. Illustrated.—J. Am. Pharm. Assoc. 1919, v. 8, p. 472–473.

Gathercoal, E. N.: A comparison of the botanical, pharmacognostical, histological, chemical and therapeutical characteristics of couch grass and Bermuda grass.—J. Am. Pharm. Assoc. 1919, v. 8, p. 26–31.

Alsberg, Carl L., et al.: Of late, Bermuda grass (*Cynodon dactylon* L.) has been substituted quite frequently for true couch grass (*Agropyron repens*).—J. Am. Pharm. Assoc. 1919, v. 8, p. 469–470.

Éwe, G.: Three lots purporting to be triticum proved to be *Cynodon dactylon*, a related grass. Bermuda grass has frequently been offered as a substitute for triticum during the past year.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 92; J. Am. Pharm. Assoc. 1919, v. 8, p. 757.

TROCHISCI ACIDI TANNICI.

Hommell, P. E.: The formula for troches of tannic acid is entirely satisfactory and yields a palatable, astringent medication with a wide range of use.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TROCHISCI CARBONIS LIGNI, N. F.

Hommell, P. E.: Troches of charcoal are recommended for digestive fermentation, but how can they be of any value with the sugar that they contain? A tablet consisting of charcoal and heavy magnesia would be a more scientific combination.—Proc. New Jersey Pharm. Assoc. 1919, p. 48–49.

TROCHISCI POTASSI CHLORATIS.

Hommell, P. E.: Troches of potassium chlorate should be deleted or placed in the N. F., as they are no longer popular. The compressed tablets now on the market replace them very satisfactorily.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

TROCHISCI SODII BICARBONATIS.

Hommell, P. E.: Troches of sodium bicarbonate are recommended as an antacid and carminative, the presence of sugar in the formula is therefore contraindicated. The troche should be deleted, and a compressed tablet flavored with oil of nutmeg substituted.—Proc. New Jersey Pharm. Assoc. 1919, p. 48.

UNGUENTA.

Hommell, P. E.: The U. S. P. specification, that ointment of rosewater be free from rancidity, should also apply to other ointments and cerates intended for physicians' prescriptions, as a rancid salve tends to irritate rather than heal dermal lesions. Those ointments which do not attack metallic substances should always be dispensed in collapsible tubes, which not only insure preservation, but are also economical and efficient.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

Kyser, E. V., and Mayo, C. A.: A paper pointing out the advantages of the use of hydrogenated oils and fats in the preparation of ointments.—J. Am. Pharm. Assoc. 1919, v. 8, p. 816–818.

Unna, E.: A discussion of the sources and properties of materials entering into the composition of ointment bases, prior to and during the war, particularly of the disadvantage in the use of certain substitutes.—Ber. deutsch. pharm. Gesellsch. 1919, v. 29, p. 309–315.

Peiro, E.: A discussion of the ointment bases and ointments of the Ph. Ital. III.—Boll. chim.-farm. 1919, v. 58, p. 337–340.

Liesegang, R. E., and Abelmann, A.: A discussion of the suitability of silicic acid as an ointment base.—Pharm. Zentralh. 1919, v. 60, p. 121–123.

Anon.: A note on the preparation of ointments containing powdered drugs or chemicals.—Pharm. Zentralh. 1918, p. 301, through Schweiz. Apoth.-Ztg. 1919, v. 56, p. 142.

Marsek, F. A.: A comprehensive discussion of cold creams, their manufacture, chemical and physical properties, and evaluation of their constituents.—Am. Perf. 1919, v. 14, p. 7–8, 43–44, 162–164, 195–196, 229–230, 263–264, 303, 355–356.

Herain: Several formulæ are given for the preparation of ointments containing copper sulphate.—L'Union pharm. 1919, v. 60, p. 69, through Pharm. J. Lond. 1919, v. 103, p. 296.

Duret, Paul: A modified formula for Metchnikoff's calomel ointment is presented. An exceptionally light, finely divided calomel is employed.—Répert. Pharm. 1919, v. 30, p. 196; Ann. inst. Pasteur, 1919, v. 33, p. 177–180.

Anon.: The French Academy of Medicine publishes the following official formula for calomel ointment: calomel, 33; lanolin, 67; vaseline, 10.—L'Union pharm. 1919, v. 60, p. 115.

Sollmann, Torald: Notes on the preparation of a dichloramine-T ointment suitable as a dressing for burns.—J. Am. M. Assoc. 1919, v. 72, p. 992–993.

UNGUENTUM ACIDI BORICI.

Hommell, P. E.: Care should be taken in preparing ointment of boric acid to use boric acid as free as possible from lead and other metallic impurities. The acid should always be in a high state of subdivision ascertainable under the microscope.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

UNGUENTUM AQUÆ ROSÆ.

Bauer, Arthur J.: The present official process for the manufacture of ointment of rose water is objected to. It is believed that an ointment in which mineral oil is used as the base would be more satisfactory generally.—Proc. New York Pharm. Assoc. 1919, p. 54.

Lampa, Robert R.: It is believed that the ointment of rose water should be of firmer consistence than that obtained by the U. S. P. formula.—Proc. New York Pharm. Assoc. 1919, p. 54.

UNGUENTUM BELLADONNÆ.

White, Wm. R.: It is stated that a much smoother ointment of belladonna than that obtained by the U. S. P. process can be made by melting the wool fat and benzoinated lard, adding the melted fats to the extract dissolved in dilute alcohol, and stirring until cold.—Proc. Tennessee Pharm. Assoc. 1919, p. 37.

UNGUENTUM CAMPHORÆ, N. F.

Hommell, P. E.: Benzoinated lard should replace lard in the N. F. formula for camphor ointment.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

UNGUENTUM CHRYSAROBINI.

Hommell, P. E.: The action of chrysarobin ointment is not always dependable, as no matter what vehicle is employed the drug is partly insoluble, leaving more or less insoluble residue in the ointment. Search for a more suitable base should be instituted.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

UNGUENTUM DIACHYLON.

Hommell, P. E.: In making diachylon ointment, white petrolatum is now substituted for olive oil, an improvement so far as consistency and preservation is concerned, but a pure oil base is more penetrating than a petrolatum one.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

UNGUENTUM GALLÆ.

Hommell, P. E.: Ointment of nutgall should have been placed in the N. F. as it is no longer popular with prescribers. Ointment of tannic acid is the astringent preparation usually called for.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

UNGUENTUM HYDRARGYRI.

Anon.: A mixture of equal parts of Venice turpentine and honey is recommended for the extinction of the mercury in the preparation of the ointment of mercury.—Farm. Españ. 1919, v. 51, p. 327.

Gabel, L. F.: The U. S. P. IX method for the assay of mercurial ointment is unsatisfactory as it gives low results. Comparative data obtained by the U. S. P. method, the sulphide method, and the extraction method are presented.—J. Ind. & Eng. Chem. 1919, v. 11, p. 960.

UNGUENTUM HYDRARGYRI AMMONIATI.

Hommell, P. E.: In dermatological practice, ointment of ammoniated mercury has been found too strong for general purposes. A 5 per cent ointment would yield more desirable results. The U. S. P. should direct that the ointment be smooth and free from irritating particles.—Proc. New Jersey Pharm. Assoc. 1919, p. 43.

UNGUENTUM HYDRARGYRI OXIDI FLAVI.

Hommell, P. E.: It is suggested that the U. S. P. direct the use of the microscope in ascertaining the fineness of the powdered oxide employed in preparing ointment of yellow mercuric oxide, and that an assay method be given for determining the yellow mercuric oxide content. Additional suggestions for improving the ointment are made.—Proc. New Jersey Pharm. Assoc. 1919, p. 43–44.

UNGUENTUM HYDRARGYRI OXIDI RUBRI, N. F.

Hommell, P. E.: Ointment of red mercuric oxide should have remained in the U. S. P., because, when smooth and absolutely free from gritty matter, it has advantages over the other mercury ointments where alterative action is indicated.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

UNGUENTUM IODI.

Kyser, E. V., and Mayo, C. A.: Hydrogenated coconut oil is stated to be particularly suited for use in the preparation of iodine ointment, as it absorbs but very little iodine.—J. Am. Pharm. Assoc. 1919, v. 8, p. 817.

UNGUENTUM PHENOLIS.

Hommell, P. E.: It is believed that carbolic acid ointment should be dispensed on physicians' prescriptions only, and not handed out promiscuously as an antiseptic for wounds, because gangrene may result from careless application.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

UNGUENTUM PICIS COMPOSITUM, N. F.

Hommell, P. E.: It is stated that compound tar ointment can be improved by using peanut oil in place of cottonseed oil.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

UNGUENTUM PICIS LIQUIDÆ.

Mueller, Bertha: The U. S. P. method for the preparation of tar ointment is criticized. A more satisfactory method is described.—Am. Druggist, 1919, v. 67, No. 11, p. 38.

UNGUENTUM STRAMONII.

Hommell, P. E.: Ointment of stramonium should be put in the N. F. as it is seldom prescribed nowadays, other agents being employed where the effect of a local anodyne is desired.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

UNGUENTUM ZINCI OXIDI.

Hahn, Edward T., and Fischelis, Robert P.: Data obtained in the examination of a number of ointment prescriptions are presented to show the desirability of a petrolatum base for zinc oxide ointment.—Proc. Pennsylvania Pharm. Assoc. 1919, p. 165–167.

White, Wm. R.: In making zinc oxide ointment it is preferable to sift the zinc oxide into the melted benzoinated lard and stir until cold rather than to rub it with the melted fat as directed in the U. S. P.—Proc. Tennessee Pharm. Assoc. 1919, p. 37.

Lampa, Robert R.: It is believed that a sufficient quantity of yellow wax or tallow to produce a firmer product should be added to the present ingredients of zinc oxide ointment.—Proc. New York Pharm. Assoc. 1919, p. 54.

UNGUENTUM ZINCI STEARATIS, N. F.

Hommell, P. E.: Ointment of zinc stearate should have remained in the U. S. P. Its present formula is excellent, and it is destined to become a dependable agent for the treatment of dermal lesions.—Proc. New Jersey Pharm. Assoc. 1919, p. 44.

URANII NITRAS.

Editorial: A note on uranium as an industrial poison. The hope is expressed that the next Revision Committee will omit uranium salts from the Pharmacopœia.—J. Am. M. Assoc. 1919, v. 72, p. 1918–1919.

MacNider, W. DeB.: Observations on the occurrence of degenerative changes in the liver in animals intoxicated by mercuric chloride and uranium nitrate are reported.—Proc. Soc. Exper. Biol. & Med. 1919, v. 16, p. 82–84.

VALERIANA.

deGraaff, W. C.: Notes on the cultivation of valerian in Holland.—Pharm. Weekblad, 1919, v. 56, p. 1109.

Boshart, Karl: A discussion of the cultivation of valerian. A bibliography is appended.—Heil- u. Gewürzpfl. 1919, v. 3, No. 3, p. 57–64.

Cocx, M. M. A.: A botanical paper, including a brief discussion of the chemical composition of valerian root. It is concluded that so long as uncertainty exists with respect to the active constituent no chemical evaluation of the root is possible.—Pharm. Weekblad, 1919, v. 56, p. 735–755.

VANILLA, N. F.

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"Jamaica ginger is ginger grown in Jamaica. It yields less than 15 per cent of cold water extract, and conforms in other respects to the standards for ginger."

"Limed ginger, bleached ginger, is whole ginger coated with carbonate of calcium. It yields not more than 4 per cent of carbonate of calcium, nor more than 10 per cent of total ash, and conforms in other respects to the standards for ginger."—Circ. U. S. Dept. Agric. 1919, No. 136, p. 13.

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HYGIENIC LABORATORY BULLETINS OF THE PUBLIC HEALTH SERVICE.

The Hygienic Laboratory was established in New York, at the Marine Hospital on Staten Island, August, 1887. It was transferred to Washington, with quarters in the Butler Building, June 11, 1891, and a new laboratory building, located in Washington, was authorized by act of Congress March 3, 1901.

Of the bulletins published by the laboratory since its establishment, copies of the following are available for distribution and may be obtained without cost by applying to the Surgeon General, United States Public Health Service, Washington, D. C.

No. 2.—Formalin disinfection of baggage without apparatus. By M. J. Rosenau.

No. 43.—The standardization of tetanus antitoxin (an American unit established under authority of the act of July 1, 1902). By M. J. Rosenau and John F. Anderson.

No. 55.—Quantitative pharmacological studies; adrenalin and adrenalin-like bodies. By W. H. Schultz.

No. 59.—The oxidases and other oxygen catalysts concerned in biological oxidations. By Joseph Hoeing Kastle.

No. 65.—Facts and problems of rabies. By A. M. Stimson.

No. 73.—The effect of a number of derivatives of choline and analogous compounds on the blood pressure. By Reid Hunt and R. de M. Taveau.

No. 78.—Report No. 4 on the origin and prevalence of typhoid fever in the District of Columbia (1909). By L. L. Lumsden and John F. Anderson. (Including articles contributed by Thomas B. McClintic and Wade H. Frost.)

No. 81.—Tissue proliferation in plasma medium. By John Sundwall.

No. 89.—Sewage pollution of interstate and international waters with special reference to the spread of typhoid fever. VI. The Missouri River from Sioux City to its mouth. By Allan J. McLaughlin.

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No. 101 (Reprint a).—IV. The sterilization of dental instruments. By H. E. Hasseltine.

No. 102.—I. Digitalis standardization. The physiological valuation of fat-free digitalis and commercial digitalin. By George B. Roth. II. Preliminary observations on metabolism in pellagra. By Andrew Hunter, Maurice H. Givens, and Robert C. Lewis.

No. 103.—I. Chemical changes in the central nervous system as a result of restricted vegetable diet. By Mathilde L. Koch and Carl Voegtlin. II. Chemical changes in the central nervous system in pellagra. By Mathilde L. Koch and Carl Voegtlin.

No. 104.—Investigation of the pollution and sanitary conditions of the Potomac watershed, with special reference to self-purification and sanitary condition of shellfish in the lower Potomac River. By Hugh S. Cumming. With plankton studies by W. C. Purdy and hydrographic studies by Homer P. Ritter.

No. 105.—Digest of comments on the Pharmacopœia of the United States of America and on the National Formulary for the calendar year ending December 31, 1914. By Martin L. Wilbert.

No. 106.—Studies in Pellagra. I. Tissue alteration in malnutrition and pellagra. By John Sundwall. II. Cultivation experiments with the blood and spinal fluid of pellagrins. By Edward Francis. III. Further attempts to transmit pellagra to monkeys. By Edward Francis.

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No. 122.—I. Deterioration of typhoid vaccine. By G. W. McCoy and Ida A. Bengtson. II. Standardization of gas gangrene antitoxin. By Ida A. Bengtson. III. Potency of bacterial vaccines suspended in oil (lipovaccines). By Ida A. Bengtson.

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